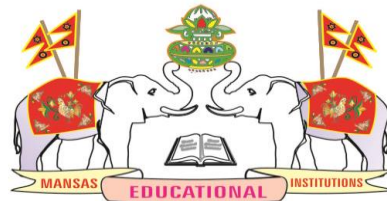


**INSTITUTIONAL ACCREDITATION  
SELF STUDY REPORT (SSR)  
(CYCLE II)**

Submitted to



**NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL  
(NAAC)**  
By



**MAHARAJ VIJAYARAM GAJAPATHI RAJ (MVGR)  
COLLEGE OF ENGINEERING**

(Approved by AICTE, New Delhi, and permanently affiliated to JNTUK, Kakinada)

Accredited by NBA of AICTE, NAAC with 'A' Grade of UGC,

Listed u/s 2(f) & 12(B) of UGC Act 1956.

Vijayaram Nagar Campus, Chintalavalasa,  
Vizianagaram-535005, Andhra Pradesh

## The visionaries



### **Late Dr. P V G Raju**

Raja Saheb of Vizianagaram  
Founder Chairman-MANSAS  
Ex-Minister for Education and Health, Govt. of AP  
Ex Member of Parliament



### **Dr. P. Anand Gajapathi Raju**

**Chairman-MANSAS**  
Ex-Minister for Education and Health  
Govt. of AP  
Ex Member of Parliament



### **P. Ashok Gajapathi Raju**

**Vice Chairman-MANSAS**  
Union Minister for Civil Aviation, Govt.  
of India  
Ex-Minister for Finance, Govt. of AP

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## PREFACE

Maharajah Alak Narayan Society of Arts and Science (MANSAS) is an Educational Trust founded by Dr. (late) P.V.G Raju, Raja Saheb of Vizianagaram in the hallowed memory of his father Maharajah Alak Narayan Gajapati with a view to confound socio-academic inequalities in the Vizianagaram principality executing a trust deed on 12-11-1958 duly established Maharajah's College and other educational institutions in and around Vizianagaram. The Trust is a charitable one published under Section 6 a (1) of A.P Charitable and Hindu Religious Institutions and Endowment Act 30 of 1987.

The object of the Trust is to manage the properties of educational institutions under it and to promote and advance the cause of education in general, besides awarding scholarships to deserving students enabling them to undergo special training in science and industries in and out of India. The Trust has made an uncompromising contribution to the nation by presenting the stalwarts like Sri V.V. Giri, former President of India, Prof. Swami Gnanananda, a renowned nuclear scientist, Major K. V. Krishna Rao and many more.

Trust offers KG to PG level education in Arts, Sciences, Law, Pharmacy, Humanities Education, Engineering and Management and presently houses 12 Educational Institutions. MVGR College of Engineering is one of the 12 institutes.

With a mission to become a center par excellence for technical education where aspiring students can be transformed into skilled and well-rounded professionals, MVGR College of Engineering was established by MANSAS trust in the year 1997. The college

- Is a 17 year old institution
- Was accredited for all eligible UG Programs(**CHEMICAL, CSE, CIVIL, ECE, EEE, IT & MECHANICAL**) by NBA in Feb/March 2009
- Was accredited for **MBA** program by NBA in January 2013
- Was also accredited with 'A' grade by NAAC of UGC in June 2009
- The Departments of MECH, ECE & CSE were recognised as **RESEARCH CENTERS** by affiliating university
- Was permanently affiliated to JN Technological University-Kakinada
- Listed under sections of 2(f) & 12(b) of UGC act 1956.
- Approved by AICTE-New Delhi

MVGR College of Engineering is rated as one among the best Engineering

Institutions in the north coastal region in particular and in the state of Andhra Pradesh in general as it sets up highest standards in all areas of curricular, co-curricular and extra-curricular activities and in students' placements.

We are very much aware that the dimensions and quality of education keeps on changing with time. It is essential for any centre of higher education to understand that true service lies in imparting education, inculcating moral values and motivating young minds towards research for the future. NAAC has developed certain measures for continuous improvement of the quality of higher education. We have left no stone unturned to meet the expectation of NAAC. We are submitting our humble SSR for your assessment after which we look forward to welcoming the peer team as the next step of accreditation. The college is committed to the core values of NAAC

**PART B**

**PROFILE OF THE AFFILIATED COLLEGE**

**1. Name and address of the college:**

**Name** MAHARAJ VIJAYARAM GAJAPATHI RAJ COLLEGE OF ENGINEERING  
**Address** Vijayaram Nagar Campus, Chintalavalasa Post  
**City & District** VIZIANAGARAM Pin: 535 005  
**State** Andhra Pradesh  
**Website** www.mvgrce.edu.in

**2. For communication:**

Designation	Name	Telephone with STD code	Mobile	Fax	Email
Principal	Dr.K.V.L. Raju	08922-241039	944001 8656	+918922 241014	principalmvgr@gmail.com
Vice-Principal	Prof D.J.J. Ramachandra Raju	08922-241039	994981 3240	+918922 241014	vpadmvg@gmail.com
Steering committee coordinator	Dr. Y.M.C.Sekhar	08922-241039	944001 8657	+918922 241014	vpacmvgr@gmail.com

**3. Status of the Institution:**

- Affiliated College :
- Constituent College :
- Any other (Specify) :

**4. Type of Institution:**

- a. By Gender
  - i. For Men :
  - ii. For Women :
  - iii. Co-education :
- b. By shift
  - i. Regular :

ii. Day :

iii. Evening :

5. Is it a recognized minority institution?

Yes:  No:

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

6. Source of funding:

Government :

Grant-in-aid :

Self Financing :

Any other :

7. a) Date of establishment of the college: 28. 08 1997

b) University to which the college is affiliated /or which governs the college (If it is a constituent college)

**Jawaharlal Nehru Technological University Kakinada,**

(Copy of Permanent Affiliation by JNTUK, Kakinada is enclosed as **Annexure – I**)

c) Details of UGC recognition:

Under Section	Date, Month & Year (dd-mm-yyyy)	Remarks (If any)
2 (f)	07-08-2012	F. No. 8-135/2011 (CPP-1/C)
12(B)	07-08-2012	F. No. 8-135/2011 (CPP-1/C)

(Copies of 2 (f) and 12 (B) of the UGC Act is enclosed as **Annexure – II**)

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

Under Section/ clause	Recognition/ Approval details Institution/ Department/ Programme	Day, Month and Year	Validi ty	Rem arks



F.No.South-Central/1-2013449191/2014/EOA	<b>B.Tech:</b> CHE,CIV,CSE,ECE, EEE, MEC & IT <b>M.Tech:</b> SE,CSE,CN&IS, VLSI, MD & PS <b>MCA &amp; MBA</b>	04-06-2014	1 Year	
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(Copy of EoA issued by AICTE is enclosed as **Annexure –III**)

8. Does the affiliating university Act provide for conferment of autonomy? (as recognized by the UGC), on its affiliated colleges?

Yes:  No:

If yes, has the College applied for availing the autonomous status?

Yes:  No:

9. Is the college recognized

a) by UGC as a College with Potential for Excellence (CPE)?

Yes:  No:

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

b) for its performance by any other governmental agency?

Yes:  No:

If yes,

Name of the agency: **NBA, New Delhi**

- 6 B.Tech programmes EEE, ME, ECE, CSE, CHEM & IT were accredited for three years with effect from 12.03.2009. The visit for re-accreditation is awaited
- MBA was accredited for three years with effect from 04.01.2013

(Copies Accreditation issued by NBA enclosed as **Annexure –IV**)

10. Location of the campus and area in sq.mts:

Location *	Rural
Campus area in sq. mts.	43.21 acres
Built up area in sq. mts.	32,853 sq.mts.

11. Facilities available on the campus (Tick the available facility and provide

numbers or other details at appropriate places) or in case the institute has an agreement with other agencies in using any of the listed facilities provide information on the facilities covered under the agreement.

- Auditorium/seminar complex with infrastructural facilities :
- Sports facilities**
  - play ground :
  - swimming pool : Nil
  - gymnasium :
- Hostel**
  - **Boys' hostel** : 
    - i) Number of hostels : **01**
    - ii) Number of inmates : **150**
    - iii) Facilities (mention available facilities)  
Spacious rooms with common bathrooms, Table, Chair, Bed & Fan, Common Room with facilities like TV and Reading Room with facilities of News Papers, Magazines, Internet etc.
  - **Girls' hostel** : 
    - i) Number of hostel : **01**
    - ii) Number of inmates : **250**
    - iii) Facilities (mention available facilities)  
Spacious rooms with common bathrooms, Table, Chair, Bed& Fan, Common Room with facilities like TV, Indoor games, Reading Room with facilities of News Papers, Magazines Internet etc.
  - **Working women's hostel** : **NIL**
    - i) Number of inmates
    - ii) Facilities (mention available facilities)
- Residential facilities for teaching and non-teaching staff** : **NIL**  
(give numbers available cadre wise)
- Cafeteria** :
- Health centre** :
- First aid, Inpatient, Outpatient, Emergency care facility, Ambulance** : 
  - Health center staff –
  - Qualified doctor: Full time:  Part-time :
  - Qualified Nurse: Full time:  Part-time :
- Facilities like banking, post office, book shops** :
- Transport facilities to cater to the needs of students and staff** :

- **Animal house** : NIL
- **Biological waste disposal** : NIL
- **Generator or other facility for management/regulation of electricity and voltage:**
- **Solid waste management facility** :
- **Waste water management** :
- **Water harvesting** :

12. Details of programmes offered by the college. : **2013-2014**  
(Give data for current academic year)

S. No.	Program Level	Name of the Program/ Course	Duration	Entry Qualification	Medium of instruction	Sanctioned /approved Student strength	No. of students admitted
1	UG	B.TECH -CHE	4Y	Intermediate	English	60	53
2	UG	B.TECH -CSE	4Y	Intermediate	English	120	120
3	UG	B.TECH -ECE	4Y	Intermediate	English	180	180
4	UG	B.TECH -MECH	4Y	Intermediate	English	180	180
5	UG	B.TECH -IT	4Y	Intermediate	English	60	52
6	UG	B.TECH -EEE	4Y	Intermediate	English	120	120
7	UG	B.TECH -CIVIL	4Y	Intermediate	English	120	120
8	PG	M.TECH-MD	2Y	B. Tech	English	18	18
9	PG	M.TECH-SE	2Y	B. Tech	English	18	18
10	PG	M.TECH-CSE	2Y	B. Tech	English	18	18
11	PG	M.TECH-CNIS	2Y	B. Tech	English	18	18
12	PG	M.TECH-VLSI	2Y	B. Tech	English	18	18
13	PG	MCA	3Y	10+2+3	English	60	19

15	PG	MBA	2Y	10+2+3	English	120	104
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13. Does the college offer self-financed Programmes?

Yes:  No:

If yes, how many? 15 ( All courses offered by the institute are self-financed)

14. New programmes introduced in the college during the last five years if any?

Yes:  No:

Number: 4

Year	UG/PG	Course	Duration
2010	PG	VLSI	2Y
2010	PG	CNIS	2Y
2012	PG	Structural Engg	2Y
2014	PG	Power Systems	2Y

15. List the departments: (respond if applicable only and do not list facilities like Library, Physical Education as departments, unless they are also offering academic degree awarding programmes. Similarly, do not list the departments offering common compulsory subjects for all the programmes like English, regional languages etc.)

Faculty	Departments (eg. Physics, Botany, History etc.)	UG	PG	Research
Science	-	-	-	-
Arts	-	-	-	-
Commerce	-	-	-	-
Any Other (Specify) Engineering	CIVIL	B.Tech	M.Tech (SE)	-
	EEE	B.Tech	M.Tech (PS)	-
	Mechanical	B.Tech	M.Tech (MD)	-
	ECE	B.Tech	M.Tech (VLSI)	-
	CSE	B.Tech	M.Tech(CSE) M.Tech(CNIS)	-
	IT	B.Tech	-	-
	Chemical	B.Tech	-	-
	MBA	-	MBA	-
MCA	-	MCA	-	

16. Number of Programmes offered under

(Programme means a degree course like BA, BSc, MA, M.Com...)

a) Annual system : ---

- b) Semester system : **15**
- c) Trimester system : **---**

**17. Number of Programmes with**

- a) Choice Based Credit System : **NIL**
- b) Inter/Multidisciplinary Approach : **NIL**
- c) Any other (specify and provide details) : **NIL**

**18. Does the college offer UG and /or PG programmes in Teacher Education?**

Yes:  No:

If yes,

- a) Year of Introduction of the programme(s).....  
(dd/mm/yyyy) and number of batches that completed the programme
- b) NCTE recognition details (if applicable)  
Notification No.: .....  
Date: ..... (dd/mm/yyyy)  
Validity:.....
- c) Is the institution opting for assessment and accreditation of Teacher Education Programme separately?  
Yes:  No:

**19. Does the college offer UG or PG programme in Physical Education?**

Yes:  No:

If yes,

- a) Year of Introduction of the programme(s)..... (dd/mm/yyyy)  
and number of batches that completed the programme
- b) NCTE recognition details (if applicable)  
Notification No. : .....  
Date : ..... (dd/mm/yyyy)  
Validity : .....
- c) Is the institution opting for assessment and accreditation of Physical Education Programme separately?  
Yes:  No:

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

Positions	Teaching faculty						Non teaching staff		Technical staff	
	Professor		Associate Professor		Assistant Professor		M	F	M	F
	M	F	M	F	M	F				
Sanctioned by the Management / society or other authorized bodies <i>Recruited</i>	<b>35</b>	<b>0</b>	<b>34</b>	<b>7</b>	<b>121</b>	<b>41</b>	<b>46</b>	<b>12</b>	<b>48</b>	<b>7</b>
<i>Yet to recruit</i>										

21. **Qualifications of the teaching staff:**

Highest qualification	Professor		Associate Professor		Assistant Professor		Total
	Male	Female	Male	Female	Male	Female	
<b>Permanent teachers :</b>							
D.Sc./D.Litt.	-	-	-	-	-	-	-
Ph.D.	32	0	13	1	4	1	51
ME / M.Tech	3	0	20	5	91	25	144
M.Phil.	-	-	-	1	8	2	11
PG (M.Sc/ MA/ M.Com / MCA/MBA)	-	-	1	-	11	3	15
UG (B.Tech)	-	-	-	-	7	10	17
<b>Temporary teachers : NIL</b>							
<b>Part-time teachers : NIL</b>							

22. **Number of Visiting Faculty / Guest Faculty engaged with the College. : NIL**

23. **Furnish the number of the students admitted to the college during the last four academic years.**

Categories	Year 1 2010 -11		Year 2 2011 - 12		Year 3 2012 -13		Year 4 2013 -14	
	Male	Female	Male	Female	Male	Female	Male	Female
SC	201	97	625	109	243	125	253	129
ST	42	23	54	32	65	35	76	34
OBC	837	421	930	512	1117	603	1304	670
General	734	383	713	404	852	416	806	452
Others	-	-	-	-	-	-	-	-

24. **Details on students enrollment in the college during the current academic year: 2013-14**

Type of students	UG	PG	M. Phil.	Ph.D	Total
Students from the same state where the college is located	824	205	-	-	1029
Students from other states of India	3	-	-	-	3
NRI students	-	-	-	-	-
Foreign students	-	-	-	-	-
<b>Total</b>	<b>827</b>	<b>205</b>	<b>-</b>	<b>-</b>	<b>1032</b>

25. **Dropout rate in UG and PG (average of the last two batches)**

UG: less than 1%

PG: less than 1%

26. **Unit Cost of Education**

*(Unit cost = total annual recurring expenditure (actual) divided by total*

*number of students enrolled)*

- a) including the salary component :Rs. 68,539/-  
b) excluding the salary component: Rs. 33,890/-

**27. Does the college offer any programme/s in distance education mode (DEP)?**

Yes:  No:

If yes,

- a) is it a registered centre for offering distance education programmes of another University  
Yes:  No:
- b) Name of the University which has granted such registration.
- c) Number of programmes offered
- d) Programmes carry the recognition of the Distance Education Council.  
Yes:  No:

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

Program	Course	Faculty : Student Ratio
B. Tech	Chemical Engineering	1:15
	Civil Engineering	1:15
	Computer Science and Engineering	1:15
	Electrical and Electronics Engineering	1:15
	Electronics and Communication Engg.	1:15
	Mechanical Engineering	1:15
	Information Technology	1:15
	MCA	Master of Computer Applications
MBA	Master of Business Administration	1:15
M. Tech	Structural Engineering	1:12
	Computer Science and Engineering	1:12
	CNIS	1:12
	VLSI	1:12
	Machine Design	1:12

**29. Is the college applying for Accreditation?**

Cycle 1:  Cycle 2:  Cycle 3:  Cycle 4:  Re-Assessment:

(Cycle 1 refers to first accreditation and Cycle 2, Cycle 3 and Cycle 4 refers to re-accreditation)

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

Cycle 1: **15/06/2009 Accreditation Outcome/Result 3.23/4.0(Grade A)**

\* Kindly enclose copy of accreditation certificate(s) and peer team report(s) as an annexure. ( Enclosed as Annexure V)

31. **Number of working days during the last academic year. : 286**
32. **Number of teaching days during the last academic year: 190**  
(Teaching days means days on which lectures were engaged excluding the examination days)
33. **Date of establishment of Internal Quality Assurance Cell (IQAC): 20.08.2009**
34. **Details regarding submission of Annual Quality Assurance Reports (AQAR) to NAAC.**
- AQAR (i)** - Earlier, the college could not submitted AQARs on annual
  - AQAR (ii)** - basis, however post accreditation AQARs from the academic
  - AQAR (iii)** - years 2009-10 have now been compiled and uploaded on
  - AQAR (iv)** - college's website and a copy of the same have been sent by e-mail to NAAC on 31.07.2014
35. **Any other relevant data (not covered above) the college would like to include. (Do not include explanatory/descriptive information)**
- Permanently affiliated to the affiliating University : Jawaharlal Nehru Technological University-Kakinada, Kakinada
  - All the eligible UG B.Tech programmes i.e. MECH, EEE, ME, ECE, CSE & IT departments were accredited by National Board of Accreditation, New Delhi
  - MBA program was accredited by National Board of Accreditation, New Delhi
  - Recognized under 2(f) & 12(B) Acts of UGC, New Delhi.
  - Accredited by Tata Consultancy Services (TCS)
  - Proposal has been submitted to UGC for grant of Autonomous status.
  - Departments of CSE, ECE & Mechanical were recognized as Research centers by Jawaharlal Nehru Technological University-Kakinada, Kakinada



**CRITERION – I****CURRICULAR ASPECTS****1.1 Curriculum Planning and Implementation****1.1.1 State the vision, mission and objectives of the institution, and describe how these are communicated to the students, teachers, staff and other stakeholders.****Vision:**

MVGR College of Engineering strives to become a center par excellence for technical education where aspiring students can be transformed into skilled and well-rounded professionals with strong understanding of fundamentals, a flair for responsible innovation in engineering practical solutions applying the fundamentals, and confidence and poise to meet the challenges in their chosen professional spheres.

**Mission:**

The management believes imparting quality education in an atmosphere that motivates learning as a social obligation which we owe to the students, their parents/guardians and society at large and hence the effort is to leave no stone unturned in providing the same with all sincerity. Towards that end, the management believes special focus has to be on the following areas:

- Have on-board staff with high quality experience and continuously updating themselves with latest research developments and sharing that knowledge with students.
- Having a well stream-lined teaching learning process that is continuously assessed for effectiveness and fine-tuned for improvement.
- Having state-of-the-art lab and general infrastructure that gives students the necessary tools and means to enhance their knowledge and understanding.
- Having a centralized department focused on improving placement opportunities for our students directly on campus and coordinating the training programs for students to complement the curriculum and enhance their career opportunities.
- Having advanced research facilities and more importantly atmosphere to encourage students to pursue self-learning on advanced topics and conduct research

**Objectives:**

The changing needs of the time are the basis while building a rich corpus of talent. Hence, the main objective of MVGR College of Engineering is to transform the students into meaningful citizens through well prepared socially committed patterns of instructions and well-designed curricular aspects. In particular,

- To have state-of-the-art infrastructure for laboratories, student centric activities, and buildings and amenities.
- To have a good record of reputed companies visiting and offering jobs for our students at campus and achieve 80% placement.
- To have a highly structured and stream-lined teaching-learning process to enable the students for all-round development of students.
- To have a strong group of accomplished teachers with a comfortable teaching load allowing them to pursue research and higher learning activities.
- To have specific committees tasked with coordinating research & industry consultancy activities, alumni interaction, and guest lectures by eminent professionals for the benefit of students and faculty.
- To help students get a thorough footing in the fundamental concepts in the core stream.
- To help students get a strong understanding on applying theory concepts in developing practical solutions.
- To help students develop ability to communicate effectively, think analytically, and innovate.
- To help students develop such other skills necessary to meet the needs of professional world.
- To provide opportunities and support for staff to be in touch with latest industry practices and developments through industry interaction.
- To consistently maintain quality of education above the benchmarks set by the statutory bodies for technical education.
- To be active members of professional bodies and establish student chapters to facilitate exposure & contribution to latest research in diverse technical areas.
- To become the preferred college of choice for students who do well in EAMCET and be listed among top 5 colleges in AP.
- To be a preferred employer of choice to high quality faculty.
- To have collaborations with a large cross-section of industries and pre-eminent institutes globally to provide more exposure to our students.
- To provide complete residential facilities to our students, staff, and faculty.
- To reach a level of expertise where faculty from college are taking up major consulting assignments in wide range of technical areas.
- To achieve 95 – 100% placements & results consistently.

**Communication to Stakeholders:**

The Governing Body and College Academic Committee are the two important

bodies of the institution. The frequent meetings are held which plan programmes and discuss key issues in tune with the vision and mission of the institution. Decision taken in the College Management Committee and College Academic Committee meetings are communicated properly to the entire staff and students through HoDs. The following criterion is followed to communicate the vision, mission and objectives of the college to the stakeholders:

- The mission, vision and objectives of the college are displayed at all prominent places in the college.
- It is communicated to the students through college prospectus, Newsletter, Handbook and also orally during the induction program.
- The vision and mission statement of the college is also placed in the college website.

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

- The college scrupulously develops action plans for effective implementation of the curriculum.
- The College Academic Committee of the college conducts frequent meetings with the Heads of the departments and staff members to come out with various strategies for effective implementation of the curriculum.
- All faculty members prepare course files for each subject and develop Lab. Manuals for all labs and these are periodically audited and modified with new developments in the field of technology. All efforts are made to maintain the quality sustenance in curriculum delivery.

The structure of subject file:

S. No.	Content
1	Syllabus of the subject
2	List of Course Objectives & Course Outcomes of the subject
3	Mapping of Course Objectives on to PEOs
4	Mapping of Course Outcomes on to POs
5	Gaps in the syllabus and plans for add-on program/guest lecturers
6	Lesson Plan
7	LECTURE NOTES (either hand-written or soft copy)
8	OHP Sheets and/or PPT hard and soft copies
9	Old University Question Papers on the subject (Last three years)
10	Old internal question papers with keys (Last three years)
11	Assignment topics/sheets (Unit-wise)
12	Tutorial sheets (Unit- wise)
13	Question Bank (Unit-wise)
14	Reference material on topics beyond syllabus
15	Questionnaire for Course outcome assessment
16	Mapping of Course Objectives onto the Course Outcomes

The structure of course file:

S. No.	Content
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1	Syllabus of the subject
2	Lesson Plan
3	Time Table
4	Attendance Register
5	Log Sheet / Daily delivery recording
6	Continuous Evaluation Marks
7	Sample answer sheets( MID exams) of students
8	Sample assignment sheets of students
9	Tutorial Classes
10	Remedial Classes
11	Makeup tests
12	Course Outcome assessment through Questionnaire
13	Guest lecturers / Add-on programs

- A detailed lecture schedule and lecture notes are prepared in all the subjects by the faculty members concerned and frequent departmental meetings are conducted to ensure effective curriculum delivery as per lecture schedules.
- Department faculty members are encouraged to impart the curriculum through innovative teaching methods such as presentations, assignments, discussions and also arranging workshops, seminars, industrial visits apart from regular/traditional teaching methods.
- The college follows scrupulously the academic calendar of affiliating university for instruction delivery. Frequent review meetings are conducted at the department level and also at the college level to assess whether the activities are being conducted as per the academic calendar.
- The meetings of class monitoring committees are held once in a month in every semester to review the progress of syllabus coverage and the effectiveness of the instruction delivery.

**1.1.3 What type of support (procedural and practical) do the teachers receive? (from the University and/or institution) for effectively translating the curriculum and improving teaching practices?**

All the departments are equipped with the following electronic resources to promote better teaching

Electronic Resources (Journals, Magazines, E-Books & Standards)

S.No	Title	Subject Covered	Total No. of Journals
1	IEEE (Institution of Electrical and Electronics Engineers)	Electrical, Electronics & Computer Science	146
2	ASCE (American Society of Civil Engineers)	Civil Engineering	33
3	Springer	Mechanical Engineering	46

4	Springer	Electrical, Electronics & Computer Science	134
5	Science Direct	All Branches (Engineering) & Sciences	Journals – 2,500 Articles – 11,207,894 E-books – 11,000
6	EBSCO	Management Science	Indexed – 1034 Full text – 1096
7	McGraw Hill	All Branches (Engineering) & Sciences	363 e-books
8	J-GATE	Engineering & Technology	Full Text – 1763 Indexed – 4633
9	J-GATE	Social & Management Science	Full Text – 2128 Indexed – 6936
10	ASTM	Engineering	Standards

- All the departments are equipped with the following IT infrastructure Resources to promote better teaching: Internet, LCD, OHP
- The University conducts workshops to the faculty of affiliated colleges, whenever it introduces new curriculum.
- The departments also conduct workshops / refresher courses on latest topics and encourage the faculty to participate in those workshops. Further, the college also deputed faculty members to various workshops held at other institutions of repute.
- Academic leave is granted to all those faculty attending workshops/seminars and also bears the expenditures incurred towards registration fee, traveling and boarding.
- The college regularly organizes teacher training programme “**TRAINING TEACHERS FOR EXCELLENCE**” with experts drawn from NITTTR, Chennai.
- The College library procures text books suggested by the faculty members and also subscribes to various journals and technical magazines to provide effective tool for the instruction delivery.
- The library and computer centers are kept open from 8:00 am to 7:00 pm to facilitate the staff member to prepare and update the course contents.
- IUCEE Material : 1 Terabyte hard disc
- 8000 Hours of NPTEL Video Courses on 248 subjects and Web Courses :129 subjects

**1.1.4 Specify the initiatives taken up or contribution made by the institution for effective curriculum delivery and transaction on the Curriculum**

**provided by the affiliating University or other statutory agency.**

- The departments conduct workshops on latest technologies related to the curricular subjects by tying up with the industry.
- The faculty are encouraged to visit industries to get practical exposure
- Bridge courses are conducted wherever necessary to see that the students follow the curricular subjects without any difficulty.
- Gaps in the syllabus are identified by the subject teacher and suitable lectures are arranged to bridge the gap.
- The departmental associations conduct group discussions and technical quiz programmes to effectively implant the knowledge in students minds.
- Students are also encouraged to give presentations on specific topics of the subjects to motivate them for higher studies.
- College provides Video Lectures delivered by eminent Professors from IITs, NITs in its library and encourages the students to listen to these lectures for better understanding of the subjects.
- The college also organizes expert lectures on various subjects by inviting faculty from various fields to share knowledge.
- Remedial classes are conducted for slow learners to bring them on par with the other students.

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

- The departments have Departmental Advisory Committees (DAC) comprising eminent educationist/industrialist/ experts from R&D institutes, as members. The suggestions of these committees are incorporated in the operationalization of the curriculum.
- The institution engages industry for joint content development and delivery in emerging areas and deploys the same for development of industry ready skills.

Dept.	Organization	Nature of Collaboration
CHEM	M/s. Simtech Simulations, Hyderabad	Enriching technical education in procedures & practices followed in Chemical Process
CHEM	Dr. Reddy Laboratories, Pydibheemavaram, Ranastalam mandal, Srikakulam	To provide training for AMIE Section-A to Employees
CHEM	Gram Tarang foods [ A unit of Centurion University]	Supercritical extraction

CSE	BOB Tech Solutions, Bangalore	Enhancing skills of students through real time project
CSE	Microsoft Ed-vantage Platinum	Industry connections for internships and employment
CSE	Oracle India Pvt. Limited Bangalore	WDP Certification
ECE	Think Labs, IIT, Mumbai	To train the trainer
ECE	National Instruments, Bangalore	To train the trainer
ECE	Y2Y Signals PVT.LTD, Visakhapatnam	Incubation Center
ECE	Wipro Technologies, PVT.LTD., Bangalore	To train the trainer
EEE	New Dawn Automation, Visakhapatnam (NDAV)	Train the trainer to faculty. Provide certificate training program organized by NDAV and MVGR College of Engineering
	SIEMENS INDIA LTD, MUMBAI	Train the trainer to faculty of MVGR college of Engineering, Training center on Siemens PLC, HMI and Drives, process instrumentation. Provide certificate training program organized by SIEMENS INDIA LTD, MUMBAI and MVGR College of Engineering
MECH	M/s Paramatric Technology (India) Pvt.Ltd., 4 F Phoenix Towers, No.16 Museum road, Bangalore-560025	Industry & Institution Authorised Training Partnership
	ZEUS NUMERIX Pvt. Ltd., Mumbai	CFD Research Centre

	M/s Kriatec Services Pvt.Ltd.,S1(Ind Floor) New No.12 Lake Veiw Street,(Errikkarai Street) Adam bakkam,Chennai-600088	Industry Institute Interaction for Technical Advancement & to support collaborative research activities
IT	TALENT SPRINT, Hyderabad	To provide IT training to students

- Workshops/lectures are arranged by tying up with the industries/research organizations on contemporary and emerging areas.
- The departments take the help of Alumni Association and Training & Placement cell to maintain professional relations with the representatives of industry. The HR managers of various companies are invited to the college campus to interact with the students and faculty.
- The students of various departments of the college are taken for industrial visits from time to time to keep them abreast of the latest developments in the industry.
- The college faculties are actively involved in the curriculum design and development and discuss proposals for curricular revisions communicated by the university from time to time.
- The faculty members are encouraged to submit research proposals to various Government research organizations/public and private sectors to promote research activities in the departments.
- The college/department(s) is a member of various professional bodies such as SAE, CSI, IETE, IEEE etc. and organizes workshops in association with these bodies for faculty development
- The institution actively associates itself with various professional bodies and conducts programs/activities to keep its faculty and students abreast with contemporary advancements/developments
- The alumni of the institution continuously supports in building and maintaining industrial networking
- The training and placement cell always building relation with HRs to increase placements

**1.1.6 What are the contributions of the institution and/or its staff members to the development of the curriculum by the University?(number of staff members/departments represented on the Board of Studies, student feedback, teacher feedback, stakeholder feedback provided, specific suggestions etc.**

The following faculty members are members of the board of studies of affiliating University and a few others are invited to review the e-learning content on various subjects.



## List of Faculty Members on BOS of JNTUK-Kakinada

Sl. No.	Name of the Faculty	Designation	Department
1	Dr. K.V.L.Raju	Professor	MECH
2	Dr. K. Rajeswara Rao	Professor	CIVIL
3	Dr. Sumit Gupta	Professor	CSE

## List of faculty members invited by JNTUK, for the review of e-learning content

Sl. No.	Name of the Faculty	Designation	Subjects reviewed
1	Dr. P.Markandeya Raju	Professor	Building Planning and Drawing
2	P.U.K. Prabha	Assoc. Professor	Linear Digital IC Applications
3	B.A.Ranganath	Assoc. Professor	Refrigeration and Air-conditioning
4	M.Krishna Sastry	Asst. Professor	Complex Variables

- The institution is in the process of forwarding application for autonomy and therefore orienting and grooming its faculty on the aspects of curricular design and development. At present, being an affiliated institution, has a limited role.
- Taking into consideration the suggestions of the students, faculty and other stakeholders through feedback and also Department Advisory Committees (DAC), the college makes its suggestions to the respective board of studies of the University.

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

Since the college is not an autonomous body to design its own curriculum and has to implement the curriculum given by the affiliating university, it introduces innovative academic programmes in the curriculum to strengthen the technical knowledge of the students. A few of such initiatives are:

- Establishment of Microsoft Innovation Centre in the college to organize Microsoft Certification programmes.
- Training on chemical process equipment design in Chemical Engg by M/s. Simtech, Simulations, Hyderabad
- To extend technical assistance in production of Ginger oil to Gram Tarang foods [ A unit of Centurion University]
- Oracle Certified Java Professional Program (OCPJP) by BOB Tech

- Solutions, Bangalore
- Industry connections for internships and employment by Microsoft Ed-vantage Platinum
  - OCPJP (Java SE 6, 1.1 – IZO -851) Certification by Oracle India Pvt. Limited Bangalore
  - To provide certification course by Think Labs, IIT, Mumbai
  - To provide certification course by National Instruments, Bangalore.
  - To provide internship to students by Y2Y Signals PVT.LTD, Visakhapatnam
  - To provide certification course by Wipro Technologies, PVT.LTD., Bangalore
  - To meet the Vocational training requirements and undertake mini projects and pilot studies to students by New Dawn Automation, Visakhapatnam(NDAV)
  - To enrich their knowledge on contemporary industrial practices by SIEMENS INDIA LTD, MUMBAI
  - To impart training on mechanical design software's(WINCHILL, CREO, PLM etc..)
  - The course modules were developed by the faculty to impart training on MAT Lab
  - The curriculum & course content to increase the skills of the technicians/supervisors was developed and provided training for technical staff of Reddy's Laboratories.

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

The institution has formed communication channels among all the stakeholders to ensure that objectives of the curriculum are achieved in the course of implementation. The achievements of stated objectives of the curriculum are ensured by:

- Analyzing the student feedback on course outcomes.
- Analyzing student feedback on faculty and content delivery.
- Analyzing the exit feedback on the curriculum and its implementation.
- Analyzing the feedback from the employers on the ability of the graduates to perform the required tasks in the industry.

## **1.2 Academic Flexibility**

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

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

Dept.	Organization	Objectives	Nature of Collaboration

CHEM	M/s. Simtech Simulations, Hyderabad	To develop and build competency among faculty in chemical process equipment design and offer training to students on industry ready skills.	Design of content, handholding, to work on real life industry problems , training for joint certification.
CHEM	Dr. Reddy Laboratories, Pydibheemavaram, Ranastalam mandal, Srikakulam	To make its employees well versed with their area of work  To train its employees a and guide them for higher academic attainments	To understand workplace dynamics and collectively design and develop training modules – deploy the same for enhanced performance.  Teaching learning and mentoring
CHEM	Gram Tarang foods ( A unit of Centurion University)	To extend research assistance in the production of Ginger oil	R&D assistance
CSE	BOB Tech Solutions, Bangalore	Enhancing skills of students through real time project	To provide industry support and guidance in identifying real time problems and impart training in the development of solutions to the same.
CSE	Microsoft Ed-vantage Platinum	Industry ready skills in software development and also for internships and placement assistance.	Training on industry ready skills and facilitating industry networking
CSE	Oracle India Pvt. Limited Bangalore	To build competencies on: OCPJP (Java SE 6, 1.1 – IZO -851) Certification	To train the trainer and Train the students on industry ready skills

ECE	Think Labs, IIT, Mumbai	To build competencies in the area of embedded systems and provide student training & certification	To train the trainer and Train the students on industry ready skills
ECE	National Instruments, Bangalore	To build competencies in the area of embedded systems and provide student training & certification	To train the trainer and Train the students on industry ready skills
ECE	Y2Y Signals PVT.LTD, Visakhapatnam	To provide internship and build competencies in embedded systems	To be an active Incubation Center for embedded systems
ECE	Wipro Technologies, PVT.LTD., Bangalore	To build competencies in the area of embedded systems and provide student training & certification	To train the trainer and Train the students on industry ready skills
EEE	New Dawn Automation, Visakhapatnam (NDAV)	To build competencies in the area of embedded systems and provide student training & certification	To train the trainer and Train the students on industry ready skills
EEE, ECE, MECH	SIEMENS INDIA LTD, MUMBAI	To bridge the gap between curriculum and industry requirements and make the students industry ready (PLCs, and AC drives)	To train the trainer and Train the students on industry ready skills
MECH	M/s Paramatric Technology (India) Pvt.Ltd., 4 F Phoenix Towers, No.16 Museum road, Bangalore-560025	To bridge the gap between curriculum and industry requirements and make the students industry ready (CAD, ANSYS, PRO-E, WINDCHILL tools)	To train the trainer and Train the students on industry ready skills

MECH	ZEUS NUMERIX Pvt. Ltd., Mumbai	To bridge the gap between curriculum and industry requirements and make the students industry ready	To train the trainer and Train the students on industry ready skills
MECH	M/s Kriatec Services Pvt.Ltd.,S1(IInd Floor) New No.12 Lake Veiw Street,(Errikkarai Street) Adam bakkam,Chennai- 600088	To bridge the gap between curriculum and industry requirements and make the students industry ready	To train the trainer and Train the students on industry ready skills
IT	TALENT SPRINT, Hyderabad	To provide training on JAVA programming to students	Training on industry ready skills and facilitating industry networking

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

NO

**1.2.3 Give details on the various institutional provisions with reference to academic flexibility and how it has been helpful to students in terms of skills development, academic mobility, progression to higher studies and improved potential for employability.**

**Skill development:**

- Add-on programs (industry verticals)
  - Pro E-WINCHILL
  - Embedded Systems
  - VLSI
  - PLC
  - Drives
  - JAVA
  - CCNA
  - Ethical haking
  - Lab view
  - Mat Lab
  - CFD
  - ORACLE
  - FEM
  - STADD
  - PLM

**Academic mobility:**

- Bio medical Engineering
- Image processing
- Open source software
- Cyber laws
- Energy audit, conservation and management
- MEMS

**Progression to higher studies:**

- GATE training
- GRE mentoring

**Improved potential for employability:**

- CRT

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

The college offers the following programs. All the programs offered by the college are self-financed only. All these programs are approved by the AICTE, New Delhi and affiliating University JNTUK, Kakinada.

Name of the Self-Financed Programs:

S. No	Department	Programme offered	Level UG/PG
1	Chemical Engineering	B. Tech(Chemical Engg)	UG
2	Computer Science & Engineering (CSE)	B. Tech(CSE) M. Tech ( CN &IS) M.Tech (CSE)	UG PG PG
3	Civil Engineering	B. Tech(Civil Engg) M. Tech (Structural Engineering)	UG PG
4	Electronics & Communication Engineering (ECE)	B. Tech(ECE) M.Tech. (VLSI)	UG PG
5	Electrical & Electronics Engineering (EEE)	B. Tech(EEE) M.Tech. (Power Systems)	UG PG
6	Information Technology(IT)	B. Tech(IT)	UG
7	Mechanical Engineering	B. Tech (Mechanical Engg.) M.Tech. (Machine Design)	UG PG
8	MBA	Master of Business Administration	PG
9	MCA	Master of Computer Applications	PG

**1. Programme:**

All the above programs are self-financed

**2. Admissions:**

70 % Admissions are carried under convener quota as per G.O.Ms.No.59, Higher Education (EC-2) Dept., dated 13- 07-2009 based on merit in Common Entrance Test (EAMCET/ICET/PGCET) and 30% of the seats are allotted under management quota based on the

- merit of Intermediate examination.
- 3. Curriculum:** The curriculum is designed by the Jawaharlal Nehru Technological University Kakinada, Kakinada and implemented by the College through the well prepared patterns of instructions. Teaching aids like LCD projectors, OHP, Computer and audio equipment's are frequently used for effective planning, implementation and delivery of the curriculum. Latest revision of curriculum is in 2013.
- 4. Fee Structure:** As fixed by Admissions and Fee Regulatory Committee (AFRC) of Government of Andhra Pradesh.
- 5. Teachers' Qualifications:** Post-Graduation / Ph.D. in the concerned branch

**6. Salary:**

	<b>Scale of Pay</b>
Assistant Professor	: Rs.15600-39100 + AGP 6000
Sr. Scale Asst. Professor	: Rs.15600-39100 + AGP 7000
Associate Professor (Scale I)	: Rs.15600-39100 + AGP 8000
(Scale II)	: Rs.37400-67000 + AGP 9000
Professor	: Rs.37400-67000 + AGP 10000

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

- To promote Entrepreneurship spirit among the student community, the college established Entrepreneurship Development cell (EDC) funded by AICTE.
- To develop and upgrade the technology in the fields of PLC applications, college tied-up with New Dawn Automation, Visakhapatnam, (NDAV).
- The college tied up with Microsoft and established Microsoft Innovation center to enhance the programming skills of students.

Additional skill oriented programmes, relevant to regional and global employment markets

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EEE, ECE, MECH	SIEMENS INDIA LTD, MUMBAI	To bridge the gap between curriculum and industry requirements and make the students industry ready (PLCs, and AC drives)	To train the trainer and Train the students on industry ready skills
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IT	TALENT SPRINT, Hyderabad	To provide training on JAVA programming to students	Training on industry ready skills and facilitating industry networking
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**1.2.6 Does the University provide for the flexibility of combining the conventional face-to-face and Distance Mode of Education for students to choose the courses/ combination of their choice” If ‘yes’, how does the institution take advantage of such provision for the benefit of students?**

NO

### **1.3 Curriculum Enrichment**

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

To integrate the academic programmes and Institution’s goals, the following initiatives are taken to supplement the University’s curriculum:

- Faculty members identify the gaps in the curriculum and include topics to bridge the gaps.
- Guest lectures, Seminars, Workshops, Training programmes and industrial visits are arranged to create awareness on the current demands of industry
- The College gives impetus on Spoken English classes to inculcate good communication skills among students.
- Educational tours are organized to develop interpersonal Relationships and to create awareness about the rich heritage and Culture of our country.
- N.S.S. is an additional facility which inculcates the social responsibilities and community orientation amongst the students.
- Various academic competitions are conducted for all round development of the students.
- Various short term programmes are prepared by the college to supplement the curriculum provided by the University to enhance employability.
- The Library is well stocked with books, journals, back volumes, e-books and e-journals.
- Additional experiments were designed in labs beyond University prescribed experiments
- Students are guided to take-up mini-projects/internships.

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

- The training and placement cell of the college regularly interacts with the HR managers of companies and collects firsthand information

about the demands and expectations of the corporate sector regarding skill set of students. These demands of the companies are taken into consideration while planning add-on and such other courses.

- Special training and tailor made orientation programmes are conducted to enable the students to achieve the global standards.
- The students are encouraged to take up mini projects and projects related to the real time problems. Students are encouraged to go to industries or research organizations to projects.

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

- The institution has a practice of constituting class representatives(CRs)-one each from both the genders
- Women Empowerment cell (WEC) is established in the college to look into the problems of girl students and lady staff members.
- Awareness workshops are conducted on human rights, climate change and gender equivalence.
- Subjects on Environmental Studies and Morals & Ethics are introduced in the curriculum to create awareness on environmental issues and build up moral and ethical values among the student community.
- ICT is embedded in the teaching learning process for effective delivery of curriculum.
- The NSS unit of the college organizes clean and green programs in rural areas to bring awareness among general public.
- Lectures by experts are arranged to inculcate and promote Ethical values among students.
- Institution encourages field visits to bring about increased awareness on environment aspects and motivates them to keep the campus clean and green

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

**Moral and ethical values**

- A separate subject on “Moral and Ethical Values” is introduced in curriculum by the affiliating University, which is dealt by senior teachers.
- Special lectures are arranged by renowned persons to instill moral and ethical values among students.

**Employable and life skills**

- Institute conducts the programs on stress management and life skills to ensure holistic development of students.
- The NSS Unit of the college involves the students in social service activities by arranging special camps in nearby villages and towns.
- Several programmes on employable skills are conducted by Training & Placement Cell (T&P) to improve the technical & soft skills of the students.
- The institute gives due importance to the co-curricular &

extracurricular activities and organizes State level technical, cultural and Games & Sports festivals to develop interpersonal and decision making skills.

- Each department is having professional club to cater the needs required for holistic development of students
- Robotics club of the institute motivates interdisciplinary students to do projects in the area of robotics which includes design, fabrication, control and programming

#### **Better career options**

- Realizing the importance of use of computers in solving engineering problems, courses on computer languages and applications are introduced in the curriculum by the affiliating University. This enhances the capability of students to fit into any type of Industry.
- Training and Placement Cell interacts continuously with employers and identifies the new areas of knowledge in demand and new career options available and train the students to enhance employability.
- The EDC cell of the college organizes awareness programmes on Entrepreneurship and Intellectual Property Rights.
- The institution facilitates alumni services to its students in career guidance and mentoring for employment and higher education
- The placement cell has a committee constituted representing faculty nominee from each department who provides career guidance at department level.

#### **Community orientation**

- The college NSS team and FYFP, a voluntary student body, regularly organizes social camps in surrounding areas and villages to create awareness among the public community on various social, moral, ethical principles and ways of life.
- FYFP activities
  - Adult education
  - Eradication of social evils
  - Prevention of school drop outs
  - Disaster management
  - Making wealth from the waste and channelizing the same to the poor
  - Sensitizing the peer on social responsibility and community services
- NSS unit of the college has adopted four schools in the nearby villages: Venkanna peta, Chittiguntlam, Aakula peta & Chintalavalasa and providing material and logistic support to school children to pursue their education
- NSS unit also conducts medical camps, Blood Donation camps and awareness programs with regard to hygenity in the villages adopted.

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

- The institution on regular basis takes note of the observations/recommendations from the industry executives and

accordingly communicating the need for revisions/modification in the curriculum. The following are the actions from the university over the last few years

- English communication skills are poor-university has introduced an advanced English communication lab/course
- Insensitivity to environmental threats – introduced across the disciplines a course on Environmental studies to help-connect the graduating students to societal challenges
- Social disorder particularly among the youth- a course on moral and ethical values was introduced to all the disciplines in addition to regular lectures by enlightened spiritual leaders of various organizations
- Lowering professional ethics- a course on IPR & patents as an audit program

### **1.3.6 How does the institution monitor and evaluate the quality of its enrichment Programmes?**

#### **Monitoring**

- The training and placement cell conducts tests on their training programmes to assess the effectiveness of training.
- Feedback is taken on all quality enrichment programmes at the end and suitable modifications are effected wherever necessary.

#### **Evaluation**

- The impact of quality enrichment programmes is assessed by analyzing the examination results and placements.
- Feedback from stakeholders like parents, industries, University experts also used for evaluation.
- The college has been consistently improving the quality of teaching by arranging pedagogical training to its faculty, and to further motivate them to Research & Development (R&D).

## **1.4 Feedback system**

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

- As an affiliating college of JNTUK-Kakinada, the college actively participates in the design and development of curriculum by communicating the suggestions made by the board of studies of different departments to the university.
- Faculty members regularly attend workshops and seminars on revision of curriculum and offer their suggestions to enrich the curriculum.

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

YES.

- Feedback is obtained from the outgoing students on curriculum and worthy suggestions is communicated to the University for Curriculum Enrichment.
- The feedback is also used internally to enrich the content and also fill the gaps in the curriculum in the form of extra content.
- Students Council meetings are organized almost every month to get feedback from the students.
- Alumni meets are organized to obtain their views on curriculum and training and recommend their suggestions to the University for necessary modification in the curriculum.
- Interactive sessions between the college officials and parents are regularly conducted to invite their suggestions with regard to curriculum and the training offered by the institute.
- Based on the suggestions received from the knowledgeable parents, internal meetings are conducted to identify the gaps in the curriculum.
- University places the proposed course structure and syllabus on university website and invites the suggestions / comments of the faculty / departments on the curriculum.
- The suggestions / comments of the faculty are communicated to the affiliating University.
- Additional laboratory hours are provided to conduct experiments beyond the syllabus to enrich the practical knowledge of the students
- The library resources are updated whenever curriculum changes are made and the required equipment is procured to meet the needs.

**1.4.3 How many new programmes / courses were introduced by the institution during the last four years? What was the rationale for introducing new courses /programmes? Any other relevant information regarding curricular aspects which the college would like to include.**

The college introduced three Post Graduate programs during the last four years. The details are given below:

Year	UG/PG	Course	Duration
2010	PG	VLSI	2Y
2010	PG	CNIS	2Y
2012	PG	Structural Engg	2Y
2014	PG	Power Systems	2Y

**(a) Justification for introducing new M.Tech programmes in VLSI**

Very Large Scale Integration (VLSI) system design is the process of creating complex integrated circuits by combining million/billion number of transistors into a single chip. This course aims to prepare the students to design analog and digital integrated circuits using custom and semicustom design flow. Worldwide, for the past five decades, the semiconductor industry has distinguished itself by the rapid pace of improvement in its products. The improvement of integration level, cost, speed, power, compactness and functionality of the integrated circuits leads to

significant improvement in economic productivity and overall quality of life through proliferation of computers, communication, industrial and consumer electronics. In India, being a fast changing technology area, VLSI design is an extremely challenging and creative sector that offers exciting opportunities and fast growth for engineers. The growing number of product and service based semiconductor industry, thus various career opportunities exist in product development companies of VLSI include mobile and consumer electronics, computing, telecommunications, networking, data processing, automotive, healthcare and industrial applications. The improvement and complexity of VLSI system can be achieved by revolution of CMOS transistors, miniaturization of transistors, VLSI design methodology, EDA tool support, fabrication support, new design idea and innovative technology which are active research area in VLSI system design. To sustain the growth rate the organizations are in need of designers, analysts, developers, manufacturing, testing and marketing engineers as well as managers with a postgraduate degree in VLSI design sector. There is a huge demand in the industry for VLSI designers to develop field-programmable gate array (FPGA) implementations, application-specific integrated circuit (ASIC) designs and PCB design. The demand of VLSI design engineers are constantly increasing in India. There is an acute shortage of skilled engineers, particularly for physical design and analog design. With the technology advancing at a fast pace, it makes sense to undergo technical training on deep sub-micron technology to become industry-ready. Through this course, MVGR will be able to support the expected demand.

(b) Justification for introducing new M.Tech programmes in CNIS

As more and more applications become network oriented & lending themselves to be used from Mobile Personal digital assistants, industry is placing a premium on resources that are aware of the intricacies of networks and issues related to information confidentiality/security. To meet this expectation, it would be ideal to have a M. Tech specialization that can build on skills students acquire related to networks at B. Tech level and prepare students with adequate amount of depth and detail to cope of the skills requirements expected in the industry. M. Tech (CNIS) program will offer a unique amalgamation of depth in networks covering wired, wireless and wireless adhoc networks and information security aspects linked with network protection, data protection on the wire among other things. This program would be ideal for students who have done B. Tech in CSE or related stream and want to specialize in the area of networks.

(c) Justification for introducing new M.Tech programmes in Structural Engineering

Structural Engineers ensure that buildings and other structures are designed and built to endure massive loads as well as changing climate and natural disasters. They are responsible for making creative and efficient use of funds, structural elements and materials to achieve these goals. The role of a structural engineer today involves a significant understanding of both static and dynamic loading, and the structures that are available to resist them. The complexity of modern structures often requires a great deal of creativity from the engineer in order to ensure the



structures support and resist the loads they are subjected to. India is growing economically and building infrastructure is the key to its future success. Structural Engineers are the primary requirement for designing huge infrastructure. There is growing domestic and international demand for Structural Engineers.

Hence, a Masters course in Civil Engineering with Structural Engineering Specialization from 2012-2013 is being started. This would be of two year duration adopting a University-mandated semester system of 4 semesters. Each semester is of 16 weeks duration. University examinations are held at the end of each semester. The second year is completely allocated for Industrial training and Project. The course structure for this program aims in transforming Civil engineers into industry ready Structural Engineers.

(d) Justification for introducing new M.Tech programmes in Power systems

Electricity is an essential requirement for all facets of our life. It has been recognized as a basic human need. It is a critical infrastructure on which the socio-economic development of the country depends. Supply of electricity at reasonable rate to rural India is essential for its overall development. Equally important is availability of reliable and quality power at competitive rates to Indian industry to make it globally competitive and to enable it to exploit the tremendous potential of employment generation. Services sector has made significant contribution to the growth of our economy. Availability of quality supply of electricity is very crucial to sustained growth of this segment.

The government of India has an ambitious mission of 'POWER FOR ALL BY 2012'. This mission would require that installed generation capacity should be at least 200 GW by 2012 from the present level of 160 GW. To be able to reach this power to the entire country, an expansion of the regional transmission network and inter regional capacity to transmit power would be essential.

In the above plan of increasing the generation capacity, the government of India is envisaging establishment of generation units both by public sector undertakings and commercial enterprises. However, transmission and distribution will be entirely taken up by the state and central boards. The present condition of the transmission and distribution systems in the country requires lot of modernization and introduction of HVDC, FACTS etc. The requirement is establishment of new technology for modernization of lines.

This requires highly trained man power conversant with the present day advances. There is a huge gap between the requirement and availability of trained man power. Taking these facts into consideration, we would like to introduce PG course in Power Systems which would facilitate the development of human resource that can cater to the emerging and envisaged action plan.



**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?**

The College follows the guidelines given by Andhra Pradesh State Council of Higher Education (APSCHE), Government of Andhra Pradesh. Admissions to the institution are categorized into two i.e., Category A & Category B for all the programs. Under category A, APSCHE makes admission the extent of 70% through a state level common entrance examination followed by counseling, whereas the institution shall conduct admission process for the remaining 30% under category B duly following the guidelines as communicated by the government from time to time

**Notification in regional / national dailies**

For category B, the institution notifies the public by publishing it in the form of notification in reputed newspapers and also all the particulars including number of seats available branch wise, criteria for selection etc. are hosted on college web portal which all the prospective candidates can easily access.

The candidates can submit the applications to the office by post, in-person or online. Applications thus received are scrutinized and organized in the order of merit by the department and college admission committee. This process is quite transparent and ensures merit based admission.

**College Website**

The college has a regularly updated website [www.mvgrce.edu.in](http://www.mvgrce.edu.in) which provides all information about the college. The **transparency** in the admission process is ensured through the following processes:

- The availability of seats in various categories and reservations, fee payable, facilities available etc. are posted on the website.
- Rules and regulations of A.P. State Higher Education relating to eligibility and the admission procedures are given in the website.
- The list of selected candidates along with their rank and selection criteria for all the programmes is posted on the website.

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

This institute is offering 7 UG and 6 PG professional courses. As per AP State Council of Higher Education (APSCHE) norms 70% students of UG and PG programmes are admitted through centralized admissions organized by the government (EAMCET for UG and GATE/PGECET for M.Tech). The remaining 30% seats (B-category, i.e. Management/NRI)

are filled by the institution duly following the above process. Notification is given by the institution in the popular newspapers calling for applications for B-category seats. Application form for B- category seats is made available in the college website and can be downloaded from the website. Merit list is prepared from the applications received, placed in the college website and notice boards.

### **MCA & MBA**

This institute is offering two PG programmes in MCA & MBA. As per APSCHE norms 70% of seats are filled through centralized admissions organized by the convener, ICET. The remaining 30% B category seats are filled by the institution following the same guidelines as per B-category admissions into B.Tech.

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

#### **i) A-Category (Convener Quota) admissions:** Criteria followed

Admission process is inclusive in nature and includes various categories like OC, BC, SC, ST, EBC, Minorities, Gender, PH, NCC, CAP and Sports. As category wise minimum and maximum is expected to complicate the analysis, the min max data of OC is expected to be highly reflective and indicative of the entry level quality. The same is furnished hereunder.

B.Tech – EAMCET ranks

M.Tech - GATE / PGECET ranks

MBA and MCA - ICET ranks

#### **ii) B-Category (Management Quota) admissions:** Criteria followed

- The Institutions approved by All India Council for Technical Education (AICTE) are permitted to fill NRI seats not exceeding 5% of the sanctioned intake in each course for the academic year shall admit NRI candidates (sons and daughters of NRIs) who have passed the qualifying examination with not less than 50% of marks in prescribed group subjects or 50% aggregate marks in the qualifying examination or Cumulative Grade Point Average (CGPA) equivalent to 5 on a scale of 10.
- The remaining seats shall be filled on merit basis with candidates including from other States and union territories who have secured rank at JEE-Main and secured not less than 45% (40% in case of candidates belonging to reserved categories) of marks in the prescribed group subjects in the qualifying examination.
- The seats remaining unfilled from the above shall be filled with eligible candidates on merit basis following eligibility criteria laid down in rule (4) of G.O.Ms.No.74.
- Thereafter, if any seats still remain unfilled such seats may be filled on merit basis with candidates securing not less than 45% (40% in case of candidates belonging to reserved categories) in the prescribed group subjects taken together/aggregate marks in the qualifying

examination.

- All affiliated colleges are governed by the admission procedures and guidelines prescribed by the APSCHE (Andhra Pradesh State Council of Higher Education), Government of Andhra Pradesh.

Program	Mode of Selection
For all B. Tech. branches	A-Category (Convener Quota) students must have passed 12th Standard(10+2). B-category students must have passed 12th Standard with minimum 50% marks
For all M. Tech. branches	Must have passed relevant B. Tech with minimum 50% marks
Master of Computer Applications (MCA)	Must have passed any Degree with minimum 50% marks
Master of Business Administration (MBA)	Must have passed any Degree with minimum 50% marks

**Quality of Students Admission Courses-wise Lowest & Highest**

**Ranks:**

**UG - B.Tech Programmes**

Category	EAMCET Ranks													
	CHEM		CE		CSE		ECE		EEE		MECH		IT	
	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest
<b>2013-14</b>														
OC	23253	124562	11096	22616	10795	19437	6765	22146	6864	16733	4080	16243	19247	51756
<b>2012-13</b>														
OC	21823	112850	14840	29994	5048	17491	5357	13690	9950	17620	4548	19044	18109	47142
<b>2011 -12</b>														
OC	18157	76857	9964	15875	7713	13422	2031	10087	2603	12691	3771	17819	16311	20976
<b>2010- 11</b>														
OC	13730	36313	6748	21145	8522	16733	3102	7382	5752	9608	3490	15400	17401	26173

**PG - M.Tech Programmes**

Category	GATE / PGECET Ranks									
	M.TECH MD		M.TECH CSE		M.TECH VLSI		M.TECH CN&IS		M.TECH SE	
	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest
2013-14										
OC	738	18141	856	909	20640	-	1186	17183	15	8393
2012-13										
OC	544	1371	703	1215	540	-	30	1153	586	1835
2011-12										
OC	1301	-	-	-	321	-	47	4415	-	-
2010-11										
OC	308	1041	-	-	422	823	-	-	-	-

**PG - MBA / MCA Programs**

Category	GATE / PGECET Ranks									
	M.TECH MD		M.TECH CSE		M.TECH VLSI		M.TECH CN&IS		M.TECH SE	
	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest
2013-14										
OC	738	18141	856	909	20640	-	1186	17183	15	8393
2012-13										
OC	544	1371	703	1215	540	-	30	1153	586	1835
2011-12										
OC	1301	-	-	-	321	-	47	4415	-	-
2010-11										
OC	308	1041	-	-	422	823	-	-	-	-

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

A review is made in every year on the quality of admissions and compared with student quality of previous years to know the college standing to make necessary measures to attract best quality students in subsequent years.

However, this review has no effect on the admission process but it helps to review the college academic strategies to get high quality input.

**2.1.5 Reflecting on the strategies adopted to increase / improve access for following categories of students, enumerate on how the admission policy of the institution and its student profiles demonstrate / reflect the National commitment to diversity and inclusion., SC/ST, OBC, Women, Differently abled, Economically weaker sections, Minority community, Any other**

As presented earlier, admission process of the institution is transparent and the government of Andhra Pradesh through APSCHE undertakes counseling through a state level process which is inclusive in its nature. Further the district of Vizianagaram being in a backward area attracts more than design/stipulated percentage admissions in various reserved categories. Therefore, it can be said that the admission process is not only transparent but also highly inclusive.

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

Sl. No.	Program	Course	Students' Intake	Students Admitted	Dem and Ratio
2013-14					
1	UG	Chemical Engineering	60	53	88.33
2		Civil Engineering	120	120	100
3		Computer Science and Engineering	120	120	100
4		Electrical & Electronics Engg.	120	120	100
5		Electronics & Communication Engg	180	180	100
6		Information Technology	60	54	90
7		Mechanical Engineering	180	180	100
1	PG	Machine Design	18	15	83.33

2		Computer Science and Engineering	18	17	94.44
3		VLSI	18	18	100
4		CN&IS	18	18	100
5		Structural Engineering	18	18	100
6		MBA	120	104	86.67
7		MCA	60	15	25
2012-13					
1	UG	Chemical Engineering	60	55	91.67
2		Civil Engineering	120	120	100
3		Computer Science and Engineering	120	119	99.17
4		Electrical & Electronics Engg.	120	118	98.33
5		Electronics & Communication Engg	180	180	100
6		Information Technology	60	53	88.33
7		Mechanical Engineering	180	180	100
1	PG	Machine Design	18	14	77.78
2		Computer Science and Engineering	18	18	100
3		VLSI	18	18	100
4		CN&IS	18	16	88.89
5		Structural Engineering	18	8	44.44
6		MBA	120	114	95
7		MCA	60	34	56.67
2011-12					
1	UG	Chemical Engineering	60	52	86.67
2		Civil Engineering	60	60	100
3		Computer Science and Engineering	120	120	100
4		Electrical & Electronics Engg.	60	60	100
5		Electronics & Communication Engg	120	120	100
6		Information Technology	60	60	100
7		Mechanical Engineering	180	180	100
1	PG	Machine Design	18	15	83.33
2		Computer Science and Engineering	18	9	50
3		VLSI	18	17	94.44
4		CN&IS	18	16	88.89
5		Structural Engineering	NA	NA	
6		Chemical Engineering	18	0	0
7		MBA	120	102	85
8		MCA	60	49	81.67
2010-11					
1	UG	Chemical Engineering	60	59	98.33
2		Civil Engineering	60	60	100

3		Computer Science and Engineering	120	120	100
4		Electrical & Electronics Engg.	60	60	100
5		Electronics & Communication Engg	120	120	100
6		Information Technology	60	60	100
7		Mechanical Engineering	120	120	100
1	PG	Machine Design	18	18	100
2		Computer Science and Engineering	18	18	100
3		VLSI	18	18	100
4		CN&IS	18	14	77.78
5		Structural Engineering	NA	NA	NA
6		Chemical Engineering	18	4	22.22
7		MBA	60	60	100
8		MCA	60	60	100

### UG Programs

- Demand for admissions both at state and institution level across disciplines usually follows the same trend. The institution over the years has observed encouraging trends in ECE, EEE, MECH, CSE & CIV branches. Our criterion for increased intake usually is centered around the job market and the progressive capacity building in terms of human resources, infrastructure and amenities. In all the branches where number of division either two or three, the above criteria is the driving factor.
- The departments of IT & CHEM are also attracting reasonably good demand but the band width of state level rankers opting for admission is either high or progressively increasing. Therefore the institution is not proposing to go for additional divisions. However, job opportunities are equally good but public perception is a limiting factor.

### PG Programs

Despite the revival of job opportunities in IT sectors over the years, the demand for admission in MCA program is progressively diminishing for the following reasons:

- The communication and problem solving ability skills of those opting for MCA observed to be low
- B.Tech./B.E. UG students are more adoptable and flexible for induction and training for ever changing industry needs compared to MCA-is the opinion of the industry.
- For same job responsibilities and skill requirements the knowledge of hardware is observed to be superior in BTech./BE graduates compared to MCA graduates, therefore industry prioritizing the former group over the latter in campus recruitments.
- Under the circumstances, the management of the institution has resolved to surrender the MCA program. The resulting infrastructure is being deployed for further strengthening the

- teaching learning process in rest of the programs.
- Over the years, the demand for admissions for M.Tech. programs is increasing for the following reasons:
    - Number of institutions offering technical education is rapidly increasing resulting in increased demand for PG qualified faculty
    - National level GATE examination was made mandatory not only for seeking admission in PG programs but also recruitment in national level institutions resulting in increased participation in GATE test. This coupled with GATE scholarship support leading to increased demand for admissions in M.Tech.
    - The above scenario setting a promoting environment for introduction of new M.Tech programs i.e., M.Tech. (CNIS), M.Tech. (VLSI), M.Tech. (Structural Engg) and M.Tech (Power Systems)
    - Whereas the demand response for M.Tech. (Chemical Engg) is observed to be not in line with the trends discussed for the following reasons:
      - Number of institutions offering B.Tech (CHEM) program are very few limiting the graduating population
      - The requirements of human resource with M.Tech. qualification for faculty position is proportionately low.
      - The traditional industry footprint requiring chemical graduates for various positions is reasonably big. Therefore most of the graduating students find their way in to jobs directly on completion of the course.
    - For the reasons cited which are largely attributed to progressively decreasing admitted strength, the M.Tech. (CHEM Engg) was surrendered.

## 2.2 Catering to Diverse Needs of Students

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

The institution is fully adhering to government policies regarding the compliance to the following needs of differently-abled students.

- Railings and ramps
- Compatible toilets
- In case of extreme physical disability, class work is arranged in the ground floor.
- Students having vision and functional disability are provided with scribes during examinations.
- Extra time is allotted for laboratory classes and special care will be taken for such students.
- For smooth and easy movement in the campus suitable wheel chairs were made available.

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

YES.



The institution assesses the students' needs in the following ways

- Induction program is conducted every year for students before commencement of class work in which the information regarding facilities, faculty expertise, rules & regulations, discipline code of the college, and the teaching-learning methodology is given to create awareness about the college. The students are encouraged to express their problems and elicit other information during induction program..
- On reporting to class work the fresher's are made to take a test ie. designed to assess the comprehensive levels of the candidate on the pre requisites. The outcomes of the assessment of these tests are analyzed and appropriate bridge programs or remedial classes are conducted to gear up the students for the program.

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

The strategies drawn and deployed by the institution are

- The institution conducts remedial classes / tutorial classes for slow learners in different subjects to enable them cope up with the courses.
- The performances of students in class/internal tests are periodically reviewed and low performers shortlisted for remedial/tutorial classes.
- Special language training sessions are conducted to those who are observed to be from Telugu medium and they are encouraged to actively participate in Hindu e- plus club aimed at addressing this problem which has a greater bearing on their level of attainment in program of their choice.
- English Language Communication Skills (ELCS) lab has been established to improve English proficiency of the students.
- Visits are arranged to create awareness on the pollution control measures taken by different industries.
- Add-on courses are organized for advanced learners to enhance their learning abilities.
- Bridge courses are conducted for lateral entry students

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

- The institution holds the tradition of imparting holistic education with emphasis on ethical and moral principles.
- The college, being co-educational institution sensitizes its staff and students on issues such as gender inclusion, environment etc. by organizing seminars on the relevant topics like women empowerment.
- Celebration of women's day by teachers and students is also a part of women empowerment programme.
- A women empowerment cell is formulated headed by one senior lady staff member and one lady faculty member from each department. This cell looks after the welfare of girl students and lady staff members.
- The college conducts seminars and conferences wherein the experts

from the above mentioned fields are invited to share and deliver their experiences and knowledge.

- Drawing and essay competitions are held regarding environment issues to keep them alive to such issues.
- Professional Ethics and Morals and Environmental Studies are part of the regular curriculum.
- The N.S.S. unit conducts awareness programmes to villagers around Vizianagaram to enlighten them on importance of education to children, environmental and social responsibilities.
- The students also involve in social service activities like clean & green programme, plantation, health checkup camps, blood donation camps, fire safety measures etc.

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

- There is a mechanism for continuous monitoring and evaluation of the students. This system helps to identify advanced learners. The advanced learners are identified based on the performance in internal exams, Regular attendance to classes and the performance in class tests.
- Advanced learners are continuously encouraged to strive for higher goals by providing them additional inputs for better career planning and growth like:
  - Assigning seminar topics.
  - Offering special coaching for GATE exam.
  - Topics on content beyond syllabus are taught
  - Training on paper presentations is imparted.
  - Encouraging them to prepare for competitive examinations like IES, GATE, CAT etc.,
  - Encouraging them to participate in classroom seminars, group discussions, technical quizzes etc. for developing analytical, problem solving and presentation skills.
  - Motivating to access latest online journals, reference materials and help them to understand the emerging trends in their field of study.
  - Training to use audio visual aids like power point, charts and models for effective presentation.
  - Motivating to participate in in-house research activities.
  - Encouraging them to participate in national level paper contests, seminars and project exhibition competitions.
  - Providing opportunity to develop their creativity by organizing intercollegiate and state level cultural, literary, technical and sports competitions.
  - Encouraging them to take specialized training through certificate courses.
  - Appointing them as student representatives at the department level committees to develop leadership skills.
  - Assistance in helping the slow learners especially during the conduct of tutorials which will enhance their communication skills.
  - Pre-placement training (PPT) classes are conducted to improve their performance in the placement interview.

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

- The departments maintain the academic record of the disadvantaged sections of society, physically challenged, slow learners, economically weaker sections etc.
- Slow learners are identified after observing their performance in class tests and first mid examinations.
- Such students are asked to explain their problems and the following measures are taken to reduce the drop outs.
- Special classes are conducted for students deficient in language skills.
- Remedial classes are organized to clarify doubts, re-explaining of critical topics for improving performance.
- One faculty member is assigned as counselor for every 20 students. The faculty counselor assesses the nature of their problem. Students with psychological / emotional problems are also motivated in a friendly way to reach their academic goals.
- Poor performance due to frequent absenteeism is dealt with by informing by phone and sending registered letters to the parents of such students.
- Teachers prepare separate learning material for slow learners.
- All the staff members maintain good relations with students and deal with their problems in a sympathetic manner.
- Learning ware Materials for all Engineering Programmes are available.

**2.3 Teaching-Learning Process**

**2.3.1 How does the college plan and organize the teaching, learning and evaluation schedules? (Academic calendar, teaching plan, evaluation blueprint, etc.)**

- Since the institute is affiliated to JNTU Kakinada, it follows the broad academic calendar and examination schedule as determined by them. Within the scope of that academic calendar, a detailed academic calendar is prepared for each program recording all the working days, internal exam schedules and other activities.
- Allocation of subjects to members of faculty as per the established load is done after duly considering faculty preference and time-tables are prepared by the timetable in-charge of the departments.
- Requisitions for inter-departmental courses are also sent well in advance to other departments.
- Each faculty member allocated a subject is asked to come up with a course plan taking into consideration the syllabus and rough duration of class available as per academic calendar. The faculty member is encouraged to refer to the subject files for the subject if already existing which includes a model course plan and is advised to make changes as deemed necessary.

- The course plans are made available for access by students in advance so they get an idea of how the syllabus would be covered. Once a course plan has been approved, syllabus coverage from time to time is monitored by comparing the course plan with lag sheet filled by teachers at the end of each class. Syllabus coverage monitoring is done at-least once a month and months leading up to end of semester, even on a bi-weekly basis.
- The external exams are administered by the affiliating university, including setting of papers, evaluation, tabulation and other details. Two internal examinations are conducted using on-line pattern by the affiliating university. Two internal examinations are conducted by the institute as per the guidelines of the affiliating university.
- All information regarding the examination pattern and marks division, minimum marks to clear the examination and other pertinent details are available in the course structure and academic regulations book given to each student at the time on enrolling into the program.

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

- The IQAC is constituted on 20.08.2009. It contributes to improve the teaching learning process in many ways. Some of them are::
- Development of Quality benchmark / parameters for various academic and administrative activities of the institute.
- Organization of workshops, seminars and quality related themes.
- Documentation of various programmes / activities leading to quality improvement.
- Conducting internal quality audit periodically.
- Preparation of Annual Quality Assurance Report (AQAR), post accreditation, to be submitted to NAAC.

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

- First and foremost, the goal of the institute is to facilitate and aid the all-round improvement of an individual while also developing the technical skills needed to be able to pursue a professional career in his/her chosen stream.
- The college offers support services to the teachers for making the learning student centric.
- The college organizes guest lectures and arranges industrial visits for students to develop their interactive, collaborative and independent learning.

#### **Interactive learning**

- All classrooms are with LAN connection with INTERNET facility.
- The college provides state of the art seminar hall and e-class rooms where students participate in group discussions, debates and seminars.

#### **Collaborative learning**

- The college has the facility of teaching aids such as OHP, LCD projectors, broadband internet connectivity, Wi-Fi connectivity.

- The departments maintain department libraries and internet facility to access all the journal, e-material, e-books etc. through library server enabling the students and faculty to keep abreast of the latest developments in their respective fields.

#### **Independent learning**

- The college provides well stocked library which consists of bulk of books, journals, project reports and other teaching material for use to students and faculty.
- The department provides well equipped labs for improving programming skills & logical thinking.

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

- The students are encouraged to design their own applications using the available equipment in the laboratory and software.
- The faculty motivates the students to participate in model making, paper presentations, software contests and various co-curricular activities in various events organized in and outside the college.
- The scientific temper among students is enhanced by providing additional laboratory hours and research activities through professional clubs.
- Students are encouraged to participate in project competitions and workshops with hands-on experience.
- Students are encouraged to come out with innovative ideas to foster scientific temper.
- Students are encouraged to take up live / industry projects.
- Students are encouraged to gain knowledge in interdisciplinary subjects through selection of open electives, seminars and discussions with experts.
- The college encourages participating in games & sports, NSS and other social activities to enhance their team-work skills, self-esteem, and personality.
- To hone critical thinking process of students various group discussions, debates and seminars are organized in which students explore new ideas.

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

##### **e-learning Resources**

- Modern teaching aids like OHP, Multimedia, Projectors, and Internet enabled Computer systems are used for class room instruction as well as other student learning experiences.
- The students are also encouraged to use computer software packages for their projects.

##### **NPTEL and other e-resources**

NPTEL video courses on 245 subjects are provided in the library.  
 E-Books : 2,200 (McGRAW-HILL-365 & ASTM Digital Library-1700)  
 E-Journals : 1,874 (IEEE-145, SPRINGER(Electrical& Electronics)-134, SPRINGER (Mechanical)-46, ASCE-34, ELSEVIER-275,  
 Article Database : J-GATE Engg. – 1,763, J-GATE Management– 2128)  
 IUCEE Material : 1 Terabyte hard disc  
 NITTTR Material : 275 CDs on all Subjects

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

- The staff members are encouraged to participate in short-term courses, staff development programmes and workshops on advanced topics to enhance their level of knowledge.
- The college organizes training programmes for junior faculty members on regular basis, by inviting resource persons from NITTTR, Chennai on the topics of
  - Instructional Design and Delivery
  - Training Teachers for Excellence
- Mission10X was launched in the college on September 5, 2007 by WIPRO TECHNOLOGIES to address the challenges of employability in engineering education.
- The key task was to develop a sustainable model to enhance the quality of engineering education in India. Though students are the end beneficiaries, it is not a feasible option to directly target them since this exercise would then have to be repeated year after year on new batches of students and would not be a viable solution. It was in this context Mission10X adopted an innovative three-pronged approach on
  - Empowering Faculty members to use Mission10X Learning Approach (MxLA)
  - Developing transformative Academic Leaders to build institutions of excellence
  - Deploying Unified Technology Learning Platforms (UTLPs) to bridge the gap between industry and academia
- Guest Lectures/ workshops are organized by inviting experts / resource persons on advanced topics for the benefit of students and faculty.
- Faculty members are encouraged to participate / present papers at national/ international seminars / conferences.
- The departments conduct paper contest, poster presentation, technical exhibition etc. under departmental association activities.
- The college organizes national/state level competitions in literary & cultural, sports & games and technical paper contests on regular basis.
- Teachers deliver “Content beyond syllabus” during their classroom instruction.

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

- The class teachers carefully monitor the regularity of attendance and the performance of the students in internal evaluation tests and end semester examinations. Accordingly, the students are advised and also remedial classes are conducted for slow learners to improve their performance in the subsequent examinations.
- Counselors are allotted for each class or group of students to provide academic and personal guidance. Usually, one faculty member is assigned as counselor for a group of 20 students. By this way, all the students of the college are benefited.
- Psychiatric counseling is made available in the campus through a qualified counselor

Counselor's Name	:Dr. K. Suneetha
Qualification	:Ph.D. (Psychology)
Timings	:8.30AM to 5.00PM

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

- Each class room is provided with internet facility.
- College has well equipped seminar halls and e-class rooms.
- The use of modern multi-media teaching aids like OHP, LCD projectors, Internet enabled computer systems are usually employed in class room instructions.
- The students are also encouraged to use computer software packages for analysis and experimental work of their projects.
- The college encourages teachers to enhance their subject knowledge and research in their respective fields using library resources and software.
- Creative assignments are prepared by the faculty in all the subjects and students are asked to prepare the solutions by referring the books and other e-learning materials.
- Seminars / symposia are conducted regularly every year to bring out inherent talents of the budding engineers. Special guest lectures are also arranged on the latest topics by eminent academicians / industrialists.
- The faculty members are encouraged to participate in National/International level seminars by extending academic leaves and the required financial assistance.
- The faculty members in turn transform their knowledge to their students either in the classroom or arranging special lectures for this purpose.
- The college organizes training programmes for junior faculty members on regular basis, by inviting resource persons from NITTTR, Chennai on the topics of
  - Instructional Design and Delivery
  - Training Teachers for Excellence
  - Mission10X was launched in the college on September 5, 2007 by



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  - Empowering Faculty members to use Mission10X Learning Approach (MxLA)
  - Developing transformative Academic Leaders to build institutions of excellence
  - Deploying Unified Technology Learning Platforms (UTLPs) to bridge the gap between industry and academia
  - ELCS lab is established to improve the verbal skills of the students.

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

The college has a central library with plinth area 767 Sq.mts with all modern facilities. The library has the following resources:

Titles	: 15,011
Total No. of Volumes	: 56065
Reference Books	: 8,245
Library Automation	: Library is automated using SOUL software and all the transactions is being done using Barcode technology. Library books are classified as per Dewey decimal classification using 21 <sup>st</sup> edition
E-Books	: 2,200 (McGRAW-HILL-365 & ASTM Digital Library-1700)
E-Journals	: 1,874 (IEEE-145, SPRINGER(Electrical& Electronics)-134, SPRINGER (Mechanical)-46, ASCE-34, ELSEVIER-275,
Article Database	: J-GATE Engg. – 1,763, J-GATE Management– 2128)
Print Journals	: 174
Book Bank for SC/ST	: 2,540
Back Volumes of Periodicals	: 1,614
<b>Digital Library</b>	
Number of Computers	: 40 with multimedia and Internet facility
Broad Band internet Connectivity	: 10 Mbps BSNL Leased Line
Library Networks Membership	: DELNET
Discussion Rooms	: 01
Video Projection Room	: 01
E-Learning Material	: 8000 Hours of NPTEL Video Courses on 248 subjects
NPTEL Web Courses	: 129 subjects
Video Courses	: 110 (each 40 hours)
IUCEE Material	: 1 Terabyte hard disc
NITTR Material	: 275 CDs on all Subjects
Media Resource Centre	: Reprographic, Printing and
Document Scanning facility	
Number of users per day	: 184 (on average)



The students are encouraged to utilize the learning materials available in the library.

The faculty and students go through the video lectures like NPTEL, NME -ICT of Professors from IITs.

The faculty and students refer the online and print journals to publish/present technical papers.

Students refer the e-learning resource material available in the digital library to enhance their technical knowledge and understanding of the subjects.

The library and Internet center are kept open beyond the working hours of institution. Students can download the required technical material.

An User Orientation Programmes are being conducted regularly to the newly admitted students to bring awareness on “How to use library resources effectively” by the college librarian

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

The institution is not facing any challenges in completing the curriculum within the planned time frame as per the academic calendar of the university as is observed from regular academic audit. However, the faculties take extra classes whenever required to complete the syllabus as per the university academic schedule

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

- The inter semester and end semester feedbacks on all the subjects are taken from the students in every semester.
- The feedback is analyzed and evaluated on the scale of 5 and every teacher is provided with a copy of feedback for making necessary corrections. Further, teachers are counseled by the head of the department, Vice-Principal (academics) and Principal, if required.
- The administration also receives the feedback by interacting with a selected group of students from each class.
- Monitoring is also done through class review committees (CRCs) to assess the uniformity in syllabus coverage, and also the quality of teaching.
- The quality of course material and assignments prepared by the faculty are assessed internally and suitable suggestions for enriching the course materials and assignments are given by the senior faculty of the departments.
- New / creative assignments are prepared every year in all the subjects

**2.4 Teacher Quality**

**2.4.1 Provide the following details and elaborate on the strategies adopted by the college in planning and management (recruitment and**

**retention) of its human resource (qualified and competent teachers) to meet the changing requirements of the curriculum?**

- A professional educational institution, aspiring for growth and development, shall have a clear vision of its policies and procedures for the furtherance and fruition of its activities. Efficient functioning, achieving the targets, building individual profiles, avoidance of confusion and creation of good rapport with colleagues is possible only if the employees are fully aware of the procedures and policies.
- With this perspective in view, comprehensive human resource norms, guidelines, procedures, duties and responsibilities for various activities have been conceived and given shape.
- The same have been published as Rules and a Hand Book brought out and circulated further, employees are apprised of the same periodically. It is hoped that strict observance of these procedures will lead to achievement of targets effectively.
- Recruitment Procedure: - The normal method of recruitment to any service in the teaching cadre is either by recruitment or career advancement duly satisfying the norms laid out by regulating bodies from time to time. Recruitment of faculty is made strictly in-accordance with the rules framed by the affiliating university and the regulatory bodies like AICTE, APSCHE.
- The candidates with qualifications and experience in line with the AICTE guidelines are recruited by constituting selection committee at college level by inviting subject experts from the University, followed by final selections/ ratification from time to time through duly constituted selection committee comprising of
  - Vice Chancellor
  - Registrar
  - Director Academic Planning
  - Rector of the University
  - Two external subject experts
  - HoD of the concerned affiliating university
  - Principal of the institution

**Qualification wise & Cadre wise split of faculty**

Highest Qualification	Professors		Associate Professors		Assistant Professors		Total
	Male	Female	Male	Female	Male	Female	
Ph.D.	32	0	13	1	4	1	51
M.Tech.	3	0	20	5	91	25	144
M.Phil.				1	8	2	11
PG(M.A/M.Sc /MBA/MCA. M.Com)			1		11	3	15
UG(B.Tech.)					7	10	17

**Retention of Faculty:**

The following retentive measures are adopted by the college to ensure long stay of its staff members in the college.

- EPF, Group Insurance, & Medical Insurance to all the staff.
- Free transport for non-teaching staff
- Cash Incentives for Research Publications.
- Basic Salary for the period of full time Ph.D.
- Reimbursement of fees in case of part time Ph.D.
- Reimbursement of TA, DA & Registration Fee for participation in Seminars/Workshops/Refresher Courses
- Sponsorship for conferences outside India subject to a maximum amount of
  - Rs. 10,000/- for presenting paper without attending
  - Rs. 15,000/- for presenting paper in person
  - Rs. 25000/- for chairing the sessions
  - Professional Society memberships (2)- Free for HODs
  - 50% membership fee reimbursement for the rest of the faculty

**2.4.2 How does the institution cope with the growing demand/ scarcity of qualified senior faculty to teach new programmes/ modern areas (emerging areas) of study being introduced (Biotechnology, IT, Bioinformatics etc.)? Provide details on the efforts made by the institution in this direction and the outcome during the last three years.**

- The courses of Biotechnology and Bioinformatics are not offered in the institution. As far as IT is concerned, our institution has recruited qualified and experienced faculty. Initially there was a dearth of faculty in the field of IT, however, the institute has sponsored a few of CSE and IT faculty to pursue M.Tech programmes in reputed universities / institutes.
- The departments of Computer Science & Engineering and Information Technology have organized several workshops / seminars on the latest subjects pertaining to the IT. This has helped the faculty members to update their knowledge in those subjects.
- To attract the new faculty and to retain the existing teachers the college provides motivational incentives like sponsoring to higher education, incentives for retention and academic advancement of faculty and special pay and providing research facilities in all the departments to pursue their Ph.D. programmes.
- Faculty members are deputed to various conferences /seminars / workshops organized by other institutes on latest subjects by granting academic leave and bearing all the expenditures including registration fee.
- During the last four years, many of our faculty members have participated in number of state level, national and international level seminars and workshops. All these teacher centric facilities helped the college in retaining the existing faculty and attracting qualified and experienced faculty to the college.

**2.4.3 Providing details on staff development programmes during the last**

**four years elaborate on the strategies adopted by the institution in enhancing the teacher quality.**

a) Nomination of faculty to Staff Development programmes during the last four years (July, 2009 to June, 2013)

Academic staff development programs	No. of faculty nominated										
	CHE	CSE	CE	ECE	EEE	IT	MECH	S&H	MCA	MBA	Total
2013-14											
a) Refresher Courses	-	-	-	6	3	3	-	1	1	-	14
b) HRD Programmes	-	-	-	6	-	-	-	-	-	-	6
c) Training Programs	-	-	1	44	8	5	-	-	-	1	59
d) Work-shops etc.	10	22	2	43	21	4	-	-	-	-	102
2012-13											
a) Refresher Courses											
b) HRD Programmes											
c) Training Programs	2	-	-	-	-	-	6	-	-	-	8
d) Work-shops etc.	9	20	-	-	-	-	1	-	-	-	30
2011 -12											
a) Refresher Courses	-	-	-	-	-	-	1	-	-	-	1
b) HRD Programmes											
c) Training Programs	3	-	-	-	-	-	1	-	-	-	4
d) Work-shops etc.	18	15					1				34
2010-11											
a) Refresher Courses							2				2
b) HRD Programmes											
c) Training Programs	1						3				4
d) Work-shops etc.	4	12					3				19

b) Faculty training programmes organized by the Institution during the last four years (July, 2009 to June, 2013).

Academic staff development programs	No. of faculty nominated										
	CHE	CSE	CE	ECE	EEE	IT	MECH	S&H	MCA	MBA	Total
2013-14											
a) T-L-E Methods				5	2		1			2	10
b) Any other	1		1		6	1					9
2012-13											
a) T-L-E Methods							1				1
b) Any other											
2011 -12											
a) T-L-E Methods							1				1
b) Any other							3				3
2010-11											
a) T-L-E Methods							2				2
b) Any other							1				1

c) Participation of Faculty as resource persons / participants and in paper presentations in various workshops / conference / seminars during the last four years (July, 2009 to June, 2013).

Academic staff development programs	No. of faculty nominated										
	CHE	CSE	CE	ECE	EEE	IT	MECH	S&H	MCA	MBA	Total
2013-14											
a) Resource Persons	2	2		4	1		1			2	12
b) Participations	4	12		21	21	12		25	3	37	135
c) Presentations	4	2		46		8		27		31	118
2012-13											
a) Resource Persons	2						1				3
b) Participations	6	15									21
c) Presentations	4	3									7
2011 -12											
a) Resource Persons	2										2
b) Participations	9	5									14

c) Presentations	13	4									17
2010-11											
a) Resource Persons	2										2
b) Participations	2	4									6
c) Presentations	6	1									7

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

- The institution extends full support for the professional development of the faculty.
- The institution deputed its teachers to attend refresher and orientation programs, conferences, seminars and training programs organized by other institutes, universities and research organizations.
- The institution also conducts number of seminars, workshops and special lectures for the benefit of its faculties and students. The institute has conducted number of workshops/seminars/ conferences during the last four years.
- The Institute grants study leave for a maximum period of three years to pursue higher studies or Ph.D. programmes with financial assistance such as paying the tuition fee and suitable pay.

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

The college provides necessary infrastructure and other required support to encourage teachers to excel in their teaching / research. The conducive environment for academic growth encourages teachers to prove their mettle. As a result, many teachers have been rewarded by various state and national level bodies. Following faculty members of the college have received awards /recognitions at State and National level during the last four years:

- Prof. Ch. V. Subba Rao, Professor of Chemical Engineering was nominated Marquis WHO'S WHO IN THE WORLD [ 31<sup>st</sup> edition]
- Dr. B. Sarva Rao, Associate Professor of Chemical Engineering [Coordinator Student activities] received "BEST STUDENT CHAPTER AWARD FROM Indian Institute of Chemical Engineers [IICHE] FOR THE YEAR 2013"
- Mr. S V A R Sastry, Sr. Asst. Professor of Chemical Engineering received UNIVERSITY BEST TEACHER AWARD [2008 -13] from JNTUK.

- Mr. S V A R Sastry, Sr. Asst. Professor of Chemical Engineering was nominated Marquis WHO'S WHO IN THE WORLD [ 31<sup>st</sup> edition]
- Mr. S V A R Sastry, Sr. Asst. Professor of Chemical Engineering was nominated in 2000 OUTSTANDING INTELLECTUALS of 21st century from International Biographical Centre, Cambridge, UK
- Mr. S V A R Sastry, Sr. Asst. Professor of Chemical Engineering was nominated 100 BEST EDUCATORS of 2013, from International Biographical Centre, Cambridge, UK
- Mr. S V A R Sastry, Sr. Asst. Professor of Chemical Engineering was nominated for LEADING PROFESSIONAL AWARD IN CHEMICAL ENGINEERING from International Biographical Centre, Cambridge, UK
- Dr. M.A.Kareem received Gold Medal for the best PhD theses from Andhra University for the academic year 2010 in the field of Nuclear Physics

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

YES.

- The evaluation of faculty by the students through feedback forms is done twice in a semester. This feedback is analyzed and appropriate suggestions are given to the faculty by the HoD concerned and the Principal to see that they rectify the short comings.
- The feedback form mainly focuses on the various teaching skills of the faculty members, like presentation, communication, knowledge, content covered, innovative practices and laboratory work.
- The faculty members below five years of service are evaluated by the external peers in the review interviews.
- The head of the institution interacts with few students of each class and takes the feedback on the teachers about the effectiveness of their classes and learning material provided.
- Performance and self-appraisals are taken from the faculty at the end of every academic year and their performance is evaluated. Based on the evaluation report faculty are counseled.

**2.5 Evaluation Process and Reforms:**

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

- The Stakeholders of the institution i.e. students and faculty members and even the parents of the students are informed about evaluation process by giving general instructions mentioned in the prospectus of the institution.
- The periodic instructions issued by the affiliating university are promptly communicated to the students.

- The faculty members read the instructions even in the classrooms and copy of the same is also displayed on the students notice-board.
- Students are informed at the start of the session regarding the internal examinations.
- Students are clearly made aware of the eligibility conditions required to appear in the final exams.
- They are informed of the criterion of the internal assessment.
- The evaluation is the integral part of teaching learning process.
- So, the institution makes effective arrangements for the smooth application of the rules about the evaluation processes.
- The college has developed a proper Mechanism for this purpose. Staff meetings are conducted periodically to review the evaluation process.
- Academic calendar and syllabus books are provided to the students.

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

- The college is affiliated to JNTUK University, Kakinada, Andhra Pradesh. The university has initiated various evaluation reforms viz.
  - Introduction of internal assessment.
  - Introduction of on-line evaluation
  - Introduction of four sets of question papers for final exams at the end of each semester.
- The college has adopted various university reforms concerning evaluation viz.
  - Internal marks are awarded to the students as per the university criteria.
  - On-line objective type examinations are conducted.
  - Student centric learning through assignments, projects, seminars and practical sessions.

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

- The evaluation reforms of the university are followed in the best of the spirit. The evaluation is all fair.
- The students are satisfied by showing them the evaluated performance in the answer sheets. Any doubt about evaluation is made clear to the students.
- All record is maintained i.e answer sheets, award lists etc. Class tests are taken and record is kept.
- Whenever class tests are conducted, the results of the student's performance/awards are shown to the students to encourage them or counsel them for better future performance.
- The institution has followed the improved examination system as prescribed by the JNTUK University, Kakinada, Andhra Pradesh.
- Students can apply for Revaluation and Challenging Revaluation procedures of the University regarding the end semester examinations.



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

- As the college is affiliated to JNTUK, Kakinada, reforms and regulations of the University in examinations and evaluation are followed.
- Even then for bringing about a positive change in the evaluation practices, the institution adopts both formative and summative methods of evaluation.
- Formative approach to evaluation includes measuring the student's achievement through seminars and class tests.
- Assignments on advanced topics for knowledge enhancement of students
- The evaluation through these approaches gives lot of information about student achievement after teaching a particular unit.
- The concerned teacher may get some direction about the student and necessary steps regarding his/her improving can be pondered over.
- The summative evaluation is done during internal examinations. All faculty members follow the formative approach to measure students' achievements & performance through 1) class test 2) assignments.
- For summative approach two internal tests are taken in the college. This is how the institution uses the formative and summative evolution approaches in the campus.

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

- Regular tests are conducted, immediately after completing one unit, during the course. The institution evaluates the students through two internal tests.
- The parents are informed through letters and even telephonically (for slow learners).
- To monitor the students' performance during an academic year, a class teacher is appointed in the department for each class manner.
- The record of the whole evaluation process is transparent. The answer scripts are shown to the students.
- The class teacher arranges to inform the parents the internal examination marks of the student's along with their class attendance.

□ **UG Programs**

Batch	Programs						
	IT	EEE	ME	ECE	CSE	CHE	CIV
2009-13	71.21	88.05	89.84	90.84	91.30	87.30	84.13
2008-12	74.60	93.75	85.59	93.70	78.44	86.30	NA
2007-11	84.62	93.75	84.84	84.14	94.66	85.70	NA
2006-10	85.25	98.41	71.01	87.79	88.23	83.00	NA
2005-09	88.06	95.52	80.32	76.69		81.00	NA

□

□ **PG Programs**

Batch	MCA	Programs	Programs					
		Batch	MBA	VLSI	CSE	MD	CNIS	SE
<b>2010-13</b>	88.13	2011-13	94.00	88.23	85.71	12.50	100.00	NA
<b>2009-12</b>	84.74	2010-12	100.00	94.44	100.00	88.23	91.66	NA
<b>2008-11</b>	95.83	2009-11	100.00	94.44	100.00	61.53		NA
<b>2007-10</b>	100.00	2008-10	100.00	NA		100.00		NA
<b>2006-09</b>	NA	2007-09		NA		NA		NA

□

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

**UG: B.Tech.**

- There is complete transparency in the internal assessment. The criterion adopted is as directed by the University.
- All the students are familiarized about the transparency in internal assessment. Each subject is evaluated through internal and external exams.
- For R-10 regulation Internal and externals are conducted for 25 and 75 respectively.
- Two internal examinations are conducted for every semester. Each internal examination consists of one descriptive and one online test for each subject.
- The descriptive test is conducted for 15 marks (exam will be conducted for 40 marks and later reduced to 15 marks) and online for 10 marks (exam will be conducted for 20 marks and is reduced to 10 marks).
- The best among the two internals will be considered.
- Online examination is conducted by the University and marks are automatically registered at University database.

**PG: M.Tech., MBA & MCA**

- The internal evaluation is done for 40 marks and external evaluation is for 60 marks
- Two MID examinations are conducted for every semester for 40 marks each. Average marks of these two mid examination are considered for final internal marks.

**2.5.7 Does the institution and individual teachers use assessment/evaluation as an indicator for evaluating student performance, achievement of learning objectives and planning? If 'yes' provide details on the process and cite a few examples.**

Yes.

The performance of the students both in midterm examinations and end semester examinations in theory and laboratory subjects and project works are considered as an indicator in evaluating the student performance and also achievement of learning objectives.

Further, students are evaluated on continuous basis in the form of conducting tutorials, assignments, class tests etc., to assess the learning outcomes.

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

**At college level:**

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

**At University level:**

- The student is entitled to apply for revaluation in theory subjects by paying the prescribed fee to the University.
- The student is also eligible to apply for challenge revaluation in theory subjects by paying the prescribed fee to the University.

**2.6 Students Performance and Learning Outcomes**

**2.6.1 Does the college have clearly stated learning outcomes? If yes, give detail on how the students and staff are made aware of these?**

YES.

The college has clearly stated learning outcomes.

- The faculty, industry and alumni are actively involved in preparing learning outcomes of the college based on Graduate Attributes.
- The learning outcomes of the college are made known to the students and staff by displaying in the departments and at all prominent places of the college.

**2.6.2 How are the Teaching, Learning and Assessment Strategies of the institution structured to facilitate the achievement of the intended learning outcomes?**

**Teaching Strategies:**

- The college follows the academic calendar given by the affiliating university and accordingly plans for lecture and tutorial hours and laboratory hours in all the theory and practical subjects.
- The class time tables are prepared in such a way that the required number of periods are assigned for all the theory and practical subjects and also include the periods for association/pre-placement training/library/games and sports activities.
- ICT is effectively used wherever necessary to impart teaching and delivering seminars.
- Special attention is focused on application part of the subject and extra content is delivered wherever necessary to meet the desired learning outcomes.

**Learning Strategies:**

- Tutorials are conducted regularly in analytical / design subjects.
- Assignments are made compulsory in all the theory subjects.
- Seminars are arranged by the students on advanced topics.
- Technical quizzes/group discussions/paper presentations are arranged through departmental associations.
- E-learning materials and video courses are made available in the central library to enhance learning outcomes.
- Industrial tours are arranged to expose the students to practical pursuits.
- Mini projects / model making are made part of the learning.
- Certificate courses on the use of modern software tools for engineering applications are conducted.
- Pre placement training is also made as a part of learning to enhance the employability.

**Assessment Strategies:****i) Direct Assessment:**

- Performance evaluation through internal and external examinations in both theory and lab.
- Performance evaluation by conduct of tutorials and assignments.
- Performance evaluation in project work.

**ii) Indirect Assessment:**

- Survey of Alumni
- Exit feedback
- Employer feedback

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

- The students are provided pre-placement training at pre-final and final year of the course to help them to secure quality jobs in the industry.
- Several seminars/workshops are conducted to create awareness on entrepreneurship by inviting industry experts.
- Advanced laboratories and innovation centers are established to nurture the creativeness of the students and improve the research aptitude.

**2.6.4 How does the institute collect and analyse data on student learning outcomes and use it for planning and overcoming barriers of learning?**

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

- Exit feedback will be taken from the outgoing students every year.
- The feedback from the alumni and also from the employer is collected.
- The data pertaining to the graduates seeking higher education and involved in research is also collected.

The feedback collected is analyzed and the necessary modifications in the curriculum and evaluation strategies are suggested to the affiliating university to meet the desired learning outcomes.

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

- Through class monitoring committees.
- Through system of continuous evaluation in both theory and lab subjects.
- Through the exit feedback, Alumni feedback and Employers feedback.
- Through analysis of examination performance in both theory and practical.
- Through the various activities of NSS.
- Through the achievements of students in co-curricular and extracurricular activities.

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

**Graduate Attributes (GA) of the college:**

Graduate Attributes (GAs) form a set of individually assessable outcomes that are the components indicative of the graduate potential to acquire competence to practice at the appropriate level. The GAs are exemplars of the attributes expected of a graduate from an institution.

The graduate attributes are:

GA1	:	Engineering Knowledge
GA2	:	Problem Analysis
GA3	:	Design/ Development
GA4	:	Conduct Investigations of Complex Problems
GA5	:	Modern Tool Usage
GA6	:	The Engineer and Society
GA7	:	Environment and Sustainability
GA8	:	Ethics
GA9	:	Individual and Teamwork
GA10	:	Communication
GA11	:	Project Management and Finance
GA12	:	Life-long Learning

- The programme outcomes are developed to attain the Graduate Attributes and to meet the programme educational objectives:

**Programme Outcomes (POs):**

**Example: Information Technology:**

Programme Outcomes are narrower statements that describe what students are expected to know and be able to do by the time of graduation. These relate to the skills, knowledge, and behaviors that students acquire in their

matriculation through the programme.

Engineering programmes must demonstrate that their students attain the following outcomes:

- a. An ability to apply knowledge of mathematics, science, and engineering.
- b. An ability to design and conduct experiments, as well as to analyze and interpret data.
- c. An ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability.
- d. An ability to function on multidisciplinary teams.
- e. An ability to identify, formulate and solve engineering problems.
- f. An understanding of professional and ethical responsibility.
- g. An ability to communicate effectively.
- h. The broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context.
- i. Recognition of the need for, and an ability to engage in life-long learning.
- j. A knowledge of contemporary issues
- k. An ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.

Programme educational objectives are formulated as given below based on stake holders feedback.

**Programme Educational Objectives (PEOs) :**

**PEO1:** Our graduates will apply their knowledge and skills to succeed in a computer science career and/or obtain an advanced degree.

**PEO2:** Our graduates will function ethically and responsibly, and will remain informed and involved as full participants in our profession and our society.

**PEO3:** Our graduates will apply basic principles and practices of computing grounded in mathematics and science to successfully complete software related projects as a part of multi-disciplinary teams to meet customer business objectives and/or productively engage in research.

**PEO4:** Our graduates will apply basic computing & information technology principles and the knowledge of major areas of application of those fundamentals to the benefit of society.

**Mapping of Graduate Attributes (GAs) to Programme Outcomes (POs)**

POs→ GAs ↓	Programme Outcomes										
	a	b	c	d	e	f	g	h	i	j	k
Engineering Knowledge	√	√	√		√						√

Problem Analysis		√	√		√						
Design/ Development		√	√		√						
Conduct Investigations of Complex Problems		√			√						
Modern Tool Usage		√									√
The Engineer and Society						√		√		√	
Environment and Sustainability			√					√		√	
Ethics						√					
Individual and Teamwork	√	√	√	√	√	√	√	√	√	√	√
Communication							√				
Project Management and Finance			√					√			
Life-long Learning									√		

**Any other relevant information regarding Teaching-Learning and Evaluation which the college would like to include.**

Evaluation process is done as per the guidelines of the university.

**CRITERION – III****RESEARCH, CONSULTANCY AND EXTENSION****3.1 Promotion of Research****3.1.1 Does the institution have recognized research center/s of the affiliating University or any other agency/organization?**

The institute has been recognized as Research Center for the Departments of Computer Science and Engineering (CSE), Electronics and Communication Engineering (ECE) and Mechanical Engineering (MECH) by the affiliating university, JNT University Kakinada, Kakinada. Also the proposals for research center status of Chemical Engineering (CHEM) and Civil Engineering (CIVIL) are under process.

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

YES

The Institute has a Research and Development Cell (RDC) comprising of the following members

Chairman : Principal

Convener : Dean R & D

Members : One from each department nominated by the department concerned, preferably with Ph.D

Ex-Officio Members : Vice-Principal (Admin), Vice Principal (Acad),

Asst. Principal (Admin), Asst. Principal (Acad), Dean (T&P)

- To promote and inculcate spirit of research among the members of the faculty by planning and organizing courses on Research Methodology for all eligible faculty members
- To promote awareness among faculty with regard to various funding agencies, their procedures, areas of research etc. and facilitate submission of proposals for possible funding
- To identify potential industry partners to network with leading to signing of MOUs for the overall development of the department or for collaborative work or for value-added training programs for students or for setting up specialized laboratory or testing facilities
- To investigate possibilities of consultancy work with the networked organizations and identify areas of consultancy
- To identify potential value-added training programs for students leading to industry certifications through the network of organizations already developed
- To identify and report on periodic basis publications in the respective departments that can be linked to research incentives as well as report on presentations made by faculty in conferences and duly debriefed in the departments and to maintain a database of such research achievements of the department



- To evolve research strategy of the departments and propose budgetary requirements for the same in order to intensify research and development activities
- To involve actively students with the support of the department to come up with viable initiatives in collaboration with major organizations as part of the Innovation Sandbox activity to increase the visibility of the institution as well as open up potential avenues for student internships and projects
- To meet periodically with the members of the R&D Board and discuss strategic approaches and achievements so as to widen the industry-institute network of each department and thus the overall reputation of the institution
- To engage faculty to undertake research leading to award of Ph.D. and also periodically monitor the progress there upon.
- To review representations and recommend the same for consideration of Academic leaves full time research/part time week end academic engagement leaves.

**Impact of recommendations:**

- The institute has applied and obtained RESEARCH CENTRE status for the branches of MECH, ECE & CSE.
- The status of research center for the departments of Chemical Engineering (CHEM) & Civil Engineering(CIV) is under process
- Re-accreditation with NBA & NAAC is under active process
- The college provides in House R & D grant every year to the departments.
- Principal investigators, who obtained projects from various organizations, are provided with necessary infrastructural facility and autonomy.
- The college facilitates timely auditing and submission of utilization certificates
- Conducts frequent awareness programmes to both students and faculty encouraging them to take up industry/society oriented projects.
- Existing laboratories are modernized with additional equipment and experimental set-ups to promote research activity in the campus.
- The institute has provided motivational incentives to the faculty for their research output.
- The college deputed faculty to present papers at various national and international conferences.
- Most of the faculty members are involved in R&D and consultancy works.

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

**Autonomy to the principal investigator**

The Principal investigators who were sanctioned projects from various funding organizations like AICTE, MHRD, DST, UGC etc., are given

full autonomy in executing the project as per the guidelines of the funding agencies and also provides matching grants, if required.

**Timely availability or release of resources**

Principal maintains a separate account for the projects sanctioned by funding agencies and institute provides all facilities and maintains timely release of project funds for completion of the project.

**Adequate infrastructure and human resources**

The departments have established research labs with necessary advanced equipment, software and computing facilities to carryout research projects. College has senior faculty possessing Ph.D degree who are competent to take up and guide research projects. Central library is fully equipped with all infrastructural, computational facilities, online national and international journals, digital library, hand books and reference books.

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

Faculty working on major research projects are given the facility of reduced teaching work load in addition to sanctioning academic leave for attending the workshops/seminars relevant to their research projects and associated works. Cash awards are being given to faculty publishing papers in reputed journals.

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

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

The college also make budget provisions to procure necessary equipment for experimental projects, subscribes to research journals to strengthen the library with latest journals, reference books and text books.

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

After completion of project by the principal investigator, the college arranges for auditing; assists in obtaining the utilization certificate for submission to the respective funding authority.

**any other**

The college invites academicians from reputed institutions like IITs & NITs, scientists and reputed researchers from the industry to share their experiences which enhance the research culture in the campus.

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

- The college has established Research & Development Cell (RDC) to promote and facilitate research and consultancy activity in the campus.
- Guest lectures by eminent academicians and industrialists are arranged to create awareness and interest among the students and faculty on research.
- College allocates budget on the following activities every year
- To promote in house R & D
- For reimbursement of TA & DA towards paper presentations, attending R & D orientation workshops, seminars etc.
- To Provide infrastructure facilities, space for department research lab, procurement of equipment and software.

- To Provide e-classrooms with LAN connection facility, LCD projectors, Audio-visual arrangements etc.
- To enhance the existing labs with research oriented equipment and establishing research labs.

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

- With the encouragement and motivational incentives provided by the college, 21 faculty members obtained their Ph.D and about 69 faculty are pursuing Ph.D.
- Some of the senior faculty themselves as registered supervisors in the panel list of different universities and are guiding research scholars.
- Faculty members are also involved actively in taking up sponsored/ collaborative projects from Central/State Government and private organizations.
- Using the infrastructure facilities and laboratories that are equipped to the level of research labs, the faculty members guide the students in their project works catering the needs of industry.

**Faculty involvement in Guiding Research students/ Higher Qualification/ Research projects during last 4 years.**

**a) Faculty involvement in Guiding Research Students**

S. No.	Activity	Name/s of faculty involved	Department	Number students guided	
				Completed	In progress
1	Ph.D. Supervision	Dr. Ch. V. Subbarao	Chemical Engineering	-	1
2	Ph.D. Supervision	Dr.SSSVGopala Raju	Civil Engineering	-	3
3	Ph.D. Supervision	Dr. C.KalyanaChakravarthy	CSE	-	1
4	Ph.D. Supervision	Dr. P.Satheesh	CSE	-	1
5	Ph.D. Supervision	Dr. R. Ramana Reddy	ECE		2
6	Ph.D. Supervision	DrK. V.L.Raju	MECH	1	1
7	Ph.D. Supervision	DrN.Ravi Kumar	MECH	-	1
8	Ph.D. Supervision	DrL.V.V.G.Rao	MECH	-	1
9	Ph.D. Supervision	A. Rajyalakshmi	E&H	2	1

**b) No. of Faculty acquired Ph.D. in the last four years: 21**

S.No.	Staff Name	Degn	Dept
1	Dr S SreenivasaRao	Professor	MCA
2	Dr M Sunil Prakash	Professor	ECE
3	DrSkMastanVali	Professor	ECE
4	Dr M Satyanarayana	Associate Professor	ECE
5	Dr Y M C Sekhar	Professor	MEC
6	Dr S SrinivasaRao	Associate Professor	MEC
7	Dr R GowrisankarRao	Professor	EEE
8	DrSarat Kumar Sahu	Professor	EEE
9	Dr V Nagesh	Associate Professor	IT
10	Dr P Satheesh	Associate Professor	CSE
11	Dr G Suvarna Kumar	Associate Professor	CSE
12	Dr C K Chakravarthy	Professor	CSE
13	Dr S Chandra Mouli	Professor	CIV
14	Mr P V Gopal Singh (Thesis submitted)	Professor	CHE
15	Mr D Krishna (Thesis submitted)	Associate Professor	CHE
16	Dr S Sankar	Associate Professor	MAT
17	Dr M SambasivaRao	Associate Professor	MAT
18	Dr S AtchutaRao	Sr. Assistant Professor	MAT
19	Dr T V N P Sarathi	Professor	CHY
20	Dr Abdul Razack	Assistant Professor	CHY
21	Dr K Rakesh	Assistant Professor	MBA

**c) Faculty undertaken Research Projects :**

Sl. No.	Activity	Name/s of faculty involved	Title (sanctioned Amount if applicable)	Number with status	
				Completed	In progress
	UGC project	Mrs. D V Padma Asst. Professor	Surfactant based Adsorption of dyes from industrial effluents.  Amount:3,40,000	-	1
	DST	Dr. Sumit Gupta	39,00,000	1	-

	DST	DrR.Ramesh	Development of artificial intelligence based decision making in open architecture control CNC (39,00,000/-)	1	-
	AICTE (RPS)	DrN.Ravikumar	Investigation of combustion, Emissions, and vibrations of VCR diesel engines using blended fuels (17,00,000/-)	1	-
	UGC	Sri B.MadhavaVarma	Vibration analysis of multi fuel VCR engine using non edible oil (1,70,000/-)	-	1
	UGC	MrsS.Jyothirmai	Development of intelligent automated furnace handling system for carbon steels (4,00,000/-)	-	1
	UGC	Mr G Ram Kumar	Rs. 3,70,000/-	-	1
	IE project	Dr. V.Nagesh, Mrs. B.Anjanadevi Ms. M.Swarna	AN EFFICIENT BRAIN MR IMAGE SEGMENTATION FOR EASY DIAGNOSTIC PROCESS	-	1

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

The institute organizes interdisciplinary and department-wise workshops, training programmes and seminars focusing mainly on capacity building in terms of research and also to create research culture among staff and students. The following are the details of such activities conducted during last four years.

**No. of Workshops / training programmes / sensitization programmes conducted/organized by the institution**

Dept	2013-14	2012-13	2011-12	2010-11
CHEM	3	1	6	6
CIVIL	4	1	3	1
CSE	3	3	7	3
ECE	2	4	1	1
EEE	1	1	2	2
MECH	2			1
IT	6	4	2	1
MBA	1	1	1	
MCA	1	1	2	

### 3.1.7 Provide details of prioritized research areas and the expertise available with the institution.

All departments are strengthened with qualified and experienced faculty. Based on the research specializations, research groups or individuals take up projects and publish papers in reputed journals. The research areas and the respective faculty expertise are given in the table below.

S.No	Branch	Research area	Faculty Expertise
1	CHEM	Process control , Mass	Dr. Ch. DurgaprasadaRao
2		Petrochemical Engg	Dr. B.K.Bhaskara Rao
3		Fluid mechanics	Prof. P. V. Gopal Singh
4		Fluid mechanics	Dr.Ch. V. Subbarao
5		Process control	Mr. D. Krishna
6		Biochemical Engg	Dr. N. Annapurna Devi
7		Biochemical Engg	Dr. B. Sarva Rao
8		Fluid mechanics	Mr. G.V.S.K.Reddy
9		Polymers	Mr. B. V. Ramanaiah
10		Energy conversion	Mr. S. V. A .R. Sastry
11		Environmental Engg	Mr. G. Ravi Kishor
12		Heterogeneous catalysis	Mr. J. LakshmanaRao
13		Mineral process Engg	Mr. G. Santhosh Kumar
14		Mass transfer	Mrs. D. V. Padma
15		Polymers	Sri G VenkataSrinu
16	Civil	Industrial Waste water	Mr. CheelaVenkata Ravi
17		Environmental Impact	Mr. CheelaVenkata Ravi
18		Environmental	Dr.K.RajeswaraRao
19		Reliability based optimal	Dr.S.Chandramouli
20		Fuzzy Inference System for	Dr.S.Chandramouli
21		Experimental study on	Dr. P.Markandeya Raju Mr.MuraliSagarVarma Sagi
22		Optimum dimensioning of	
23		1. To study the effect of	
24		Low cost building material	
25		Experimental study on	
26	CSE	Networks	Dr. S.SrinivasaRao
27		Networks Security	Dr. C.Kalyan
28		Bio-Informatics	Dr. P.Satheesh

29		Image Processing	Dr. G.Suvarna Kumar	
30		Networks	Mr. P.RaviKiranVarma	
31		Image Processing &	Mr. C.Veerabhadrarao	
32		Network Security	Mr. B.Srinivas	
33		Artificial Intelligence	Mrs. K.S.Jhansi	
34		Information Security	Mr. K.V.Subba Raju	
35	ECE	Microwave Engineering	Dr. M Sunil Prakash	
36			Dr S M Vali	
37			Dr M Satyanarayana	
38		Embedded Systems	Dr Ramana Reddy	
39			K Rakesh	
40			G Shanmukha Rao	
41		VLSI	Dr Ramana Reddy	
42			Raja Ramesh	
43			A Ashok	
44			P Srikanth	
45		Signal / Image	P Surya Prasad	
46			D H H Santosh	
47		MECH	Facility Location	DrK.V.L.Raju
48			Inelegance Manufacturing	DrR.Ramesh
49	Alternative Fuels		DrY.M.C.Sekhar	
50	Alternative Fuels		DrS.Adinarayana	
51	Alternative Fuels		DrN.Ravi Kumar	
52	Finite Element Analysis		DrL.V.V.G.Rao	
53	Vehicle Dynamics		DrS.SrinivasaRao	
54	Robotics		Sri K.Praveen	
55	Vehicle Dynamics		Sri M.K.Naidu	
56	Facility Location		Sri M.AnilPrakash	
57	Composite Materials		Sri B.A.Ranganath	
58	Inelegance Manufacturing		Sri R.S.U.M.Raju	
59	Alternative Fuels		Sri G.Rajesh	
60	Alternative Fuels		Sri B.MadhavaVarma	
61	IT	Cloud Computing, Grid	Dr. V.Nagesh,	
62		Image Processing	Dr. V. Nagesh,	
63		Security	Mr. P SrinivasaRao	
64		Data Mining, Social	Mrs. K Sobha Rani	
65	CHY	Computational chemistry,	Dr K M M Krishna Prasad	
66		Spectrophotometric	Dr B SreeramaMurty	
67		Kinetics of chemical	Dr T V N ParthaSarathi	
68		Analytical chemistry	Mr G Ram Kumar	
69		Organic chemistry	Dr Abdul Razzack	
70		Spectrophotometric	Mr G V S R Pavan Kumar	
71	MBA	Finance	Dr.K.S.S Rama Raju	

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

The institute frequently invites the eminent researchers from reputed institutions and organizations for enhancing the capacity of the faculty and students in the field of research. The following members visited the college during the last 4 years.

Statement showing the details of eminent researchers / resource persons visited the college during last 4 years.

S.No	Branch	Name of resource person and organization	Date/s
1	CHEM	Dr. K. Rama Rao, Faculty, National University of Singapore. <u>Topic:</u> Opportunities for Chemical Engineers	24.03.14
2		Prof. KDP Nigam, IIT Delhi <u>Topic:</u> <i>Eco-friendly Technologies for Better Tomorrow</i>	14.09.13
3		Sri Praveen Saxena, Director & CEO, Blast Carboblocks Pvt Ltd, Mumbai <u>Topic:</u> successful implementation of green technologies in the Industry	14.09.13
4		Prof. ChDurga Prasad Rao (Retd.), IIT Madras Presently Professor in Chem Engg, MVGRCE, VZM <u>Topic:</u> importance of green practices in the current scenario	14.09.13
5		Dr. Rakesh, Director (R&D), Dr. Reddy's Lab, Hyderabad <u>Topic:</u> green practices in Pharmaceutical Industries	15.09.13
6		Prof. N.C.Pradhan, IIT Kharagpur <u>Topic:</u> Eco-friendly processes for the production of valuable chemicals from Hydrotreater off gas	15.09.13
7		Prof. Sri P. Vijayaraghavan, Ex-President Reliance (GJVJ Raju Endowment Lecture) <u>Topic:</u> role and responsibilities of Chemical Engineers in implementing green technologies	15.09.13



8		Mr. SURESH BABU SABBAVARAPU (B. Tech (Alumni of MVGRCE),) Marketing Manager, Agile Informatics, Singapore. M. B. A. (Marketing & International Business) from Griffith University, Australia) <u>Topic: "Career Post Bachelors, communication and Body language"</u>	24.02.12
9		Dr. Vivek Dhand, Senior Knowledge Officer, (Sc-D), Center for Knowledge Management of Nanoscience& Technology, (CKMNT), HYD. Dr. S. Pallam Setty, Prof. in CSE., AU, VSP. Prof. K. M. M. Krishna Prasad, MVGRCoE, VZM <u>Topic: Invited lectures on Nano Technology</u>	17.02.12
10		Dr. I. Arun, (B. Tech (Alumni of MVGRCE),) <u>Topic: " Career &amp; Employment opportunities for Chemical Engg graduates"</u>	17.02.12
11		Prof. S. V. Satyanarayana, Chairman BoS Chemical Engg., & Professor, Dept. of Chemical Engg, JNTU, Anantapur <u>Topic: "Pervaporation: A novel separation technique</u>	06.08.11
12		Dr. Sridevi, Assistant Professor, Department of Chemical Engineering, IIT-Delhi <u>Topic: Basic Aspects Of Chemical Engineering Related To Alkylation Reactions</u>	18.06.10
13		Mr. DominiqueSavio, Manager – operations, Krebs biotech Industries Ltd, Yelamanchili, Visakhapatnam <u>Topic: TROUBLE SHOOTING OF HEAT AND MASS TRANSFER PROBLEMS IN BIOTECH INDUSTRIES"</u>	10.07.10
14	CSE	Mr. Y.Ramu& Mr. P.Vinod/TCS Chennai	16.08.2013
15		Mr.Anup Roy/Cyber Q Consulting Pvt. Ltd	26.02.2014

16		Sri Gopi Kumar Bulusu/CEO, Sankhya Technologies	15.09.2012
17		Dr. A. Louise Perkins, Professor, University of Southern Mississippi, USA Dr. Sumanth Yenduri, Assoc. Professor/ University of Southern Mississippi, USA	06.01.2012 & 07.01.2012
18		P.S. Avadhani/Andhra University, Vskp	16.02.2012
19		Mr. Sharath, Software Engineer/Swecha Organization, Hyd	19.02.2011
20		Prof. G.T. Rao, GMRIT	21 <sup>st</sup> March 2014
21		Prof. N.S. Murthy, NIT Warangal	6 <sup>th</sup> March 2014
22		Prof Ganapathi Pande, Dy. Director IIT Bhu	8 <sup>th</sup> March 2014
23		Akula Naresh, Scientist – D, NSTL, VSP	28 <sup>th</sup> June 2012
24		Dr.S.Srinivas Kumar, Professor, ECE, JNTU, Kakinada	12 <sup>th</sup> September, 2012
25		Mr. Gopi Kumar Bulusu, CEO Sankhya Technologies Private Limited	15 <sup>th</sup> September, 2012
26		Rakesh, National Instruments, Bangalore	15 <sup>th</sup> February, 2013
27		Dr.Ch.Srinivasa Rao, Professor, JNTU, Vizianagaram	12 <sup>th</sup> March, 2013
28		Sri SM.Chakravarthy, Director – II, DLRL, Hyderabad.	22-12-11
29		Sri Abraham Varughese, Scientist – F, NSTL, Visakhapatnam.	23-12-11
30		Sri T.K.C.Patro, Associate Director, NSTL, Visakhapatnam.	23-12-11
31		Sri S.Shanmukha Rao, LSIRD	28-6-10
32		Dr.R.Surya Narayana Raju, CEERI	28-6-10
33		Sri K.Srikanth, NSTL	25-9-10
34		Dr.N.S.Murthy, NIT	18-3-11
35		Dr. S.Ashok, Professor, NIT Calicut	26-01-2014
36		Sri. Anand Saxena, Expert in Solar Systems	26-01-2014
37	EEE	Sri. E. Dayanand, Joint General Manager, ESSAR Steels, Visakhapatnam	25-01-2014
38		Dr. Sukumar Misra, Professor, IIT, Delhi	24-01-2014
39		Sri. M. Dharma Raju, ADE, APEPDC Ltd, Visakhapatnam	26-07-2013
40		Dr. D.Devendranath, Additional Director, CPRI, Hyderabad	20-07-2013

41		Sri. M. Ramachandra, AGM, Thermal Power Plant, Visakhapatnam Steel Plant, Visakhapatnam	19-07-2013
42		Sri. V. Ravi Shankar, Assistant Engineer – Energy Audit, APEPDCL, Visakhapatnam	12-07-2013
43		Sri. R. SaileshRao New Dawn Automation Training & Services, Visakhapatnam	21-07-2012
44		Sri. Krishnendu Roy DGM Steelplant, Visakhapatnam	18-02-2012
45		Dr. Debapriya Das Professor, IIT, Khargapur	19-12-2011
46		Dr. K. Vaishak, Professor, Andhra University, Visakhapatnam	17-12- 2011
47		Dr. D.Das, Professor, IIT, Khargapur	18-12-2011
48		Sri. N.S.P.Rao, Superintendent NTPC Simhadri, Parawada	13-10-2011
49		Prof. D.M. Vinodh Kumar Dean (Academics), NIT, Warangal	02-07-2011
50		Dr. S V L Narsimham Professor, School of Information Technology, JNTUH, Hyd	26-05-2011
51		Sri S Ganapathi Superintending Engineer (Rtd.) APTRANSCO	09-03-2011
52		Sri Pradeep Kumar Das Manager (Electrical) BHPV Ltd, Vishakhapatnam	18-08-2010
53		Sri R V RamanaRao Divisional Electrical Engineer (Rtd) APEPDCL, Visakhapatnam	13-08-2010
54		Prof.V.GPatnaik Chairman, Placements GITAM University, Visakhapatnam	31-07-2010
55		Prof.P.N.Rao	8, 9th July 2013
56		Mr.AyushNadimpalli	19.02.2013
57		Prof.P.RajuMantena	22. 12. 2012
58		Mr.S.Srikanth	13.08. 2012
59		Sri N.Subramanian,	6 <sup>th</sup> August 2011
60		Mr. Abhijeet,	2nd Feb 2011
61		Mr.Randeev	2nd Feb 2011
62		Prof.B.V.S.S.S Prasad	26.05.2013
63		Prof.N.V.Reddy,	27th May 2009
64		Prof.B.Ravi,	27th May 2009
65		DrN.RameshBabu,	30th May 2009
66		Prof.S.K.Paul,	1st June 2009
67		Prof B.Gurumurthy,	3rd June 2009
	IT	Mr.VenkatRao, Assoc Prof, CS&SE, Andhra University	15/7/2009

68		Mr. AnkitFadia,	24/7/2009
69		Dr.D.R.PrasadaRaju,Scientist-GAdviser Dept. of Science & Technology, New Delhi	30/7/2009
70		Mr.Sharath, SWECHA organization	19/2/2011
71		Ms.PrathimaAmonkar, Microsoft Dream Spark Yatra	18/3/2011
72		Prof. P. S. Avadhani Andhra University	16/2/2012
73		Mr. Venkat Raju, CEO BOB TECHNOLOGIES, Bangalore	27/4/2012
74		Avadhani Prof. of CSE, AU, Waltair	17/2/2012
75		Dr. A. Louise Perkins (Professor University of Southern Mississippi, USA) & Dr. SumanthYenduri (Assoc. Professor, University of Southern Mississippi, USA)	6/2/2012
76		Dr. S. Srinivas Kumar, Prof of ECE and Director (R&D) JNTU Kakinada	12/9/2012
77		Lecturer Sri Gopi Kumar Bolusu, CEO Sankhya Technologies, Visakhapatnam	15/9/2012
78		Mr. Y. Ramu and Mr. P. Vinod Reddy of Tata Consultancy Services (TCS)	16/8/2013
79		Mr.T.S.Chakravarthi –University of Toronto Canada	06 <sup>th</sup> Jan,2014
80		Sri.P.BalaSubramanyam-FAPCCI,HYD	25 <sup>th</sup> Mar,2014
81		Mr.C.RamaGopal-Prof National Law University, Bhopal	17 <sup>th</sup> Mar,2014
82		Prof.P.S.S.Sita Rama Raju-HOD IT	08 <sup>th</sup> Feb,2013
83		Mr. Ravi SankarSaripalle-Former Excutive WIPRO	12 <sup>th</sup> Mar,2013
84		Mr. Y. Sankar-HSBC VSP	21 <sup>th</sup> Oct,2013
85		Mr. C.RamaGopal-Charter Accounting IIM Indore	28 <sup>th</sup> Oct,2013
86	MBA	Mr.S.Sudhir Kumar-HRM Development- VSP	11 <sup>th</sup> Dec,2013
87		Mr.K.Sridhar-Talent Sprint,HYd	13 <sup>th</sup> Dec,2013
88		Mr.K.P.Krishna-BNP Chennai	15 <sup>th</sup> Dec,2013
89		Mr.C.S.Raju-Vice President-HR Maruti Suzuki New Delhi	28 <sup>th</sup> Dec,2013
90		Prof.D. Krishna sundhr IIM Banglore	10 <sup>th</sup> Jan,2012
91		Mr. S.SureshBabu AGILE Informatics singapur	24 <sup>th</sup> Feb,2012
92		Dr.srinivasSavaram Head IT consulting -VSP	24 <sup>th</sup> Apri,2012
93		Sri.K.S. Rao corporate focus, VSP	13 <sup>th</sup> july,2012
94		Sri.SyedMd Noor Shakir –Dir Empower Training solutions ,HYD	19 <sup>th</sup> july,2012
95		Smt.UmaVedula- AGM, IDBI BANK	12 <sup>th</sup> Oct,2012

96	Mr. V.Mohan Sunil-Home secretary of India CBI New Delhi	09 <sup>th</sup> Nov,2012
97	Dr.M.Lakshmipathi Raju – DCMS AU	Mar,2011
98	Dr.K. Rama Mohan Rao-DCMS AU	Mar,2011
99	Dr.R.MadhusudhanRao-DCMS AU	March,2011
100	Dr.M.Lakshmipathi Raju – DCMS AU	April,2011
101	Dr.K. Rama Mohan Rao-DCMS AU	April,2011
102	Dr.R.MadhusudhanRao-DCMS AU	April,2011
103	Dr.G.S.Shiva Kumar CEO Maple soft	April,2011
104	Dr.B.V.N.Raju Vice President, HR Synergies Castings	Sept,2011
105	Dr.M.Lakshmipathi Raju –DCMS AU	Feb,2010
106	Dr.K. Rama Mohan Rao-DCMS AU	Feb,2010
107	Dr.R.MadhusudhanRao-DCMS AU	Feb,2010
108	Dr.M.Lakshmipathi Raju – DCMS AU	April,2010
109	Dr.K. Rama Mohan Rao-DCMS AU	April,2010
110	Dr.R.MadhusudhanRao-DCMS AU	April,2010
111	Mr.Shiva Kumar CEO Maple Soft	October,2009
112	Mr.B.V.N.Raju Vice President,HR Synergies Casting	October,2009

**3.1.9 What percentage of the faculty has utilized Sabbatical Leave for research activities? How has the provision contributed to improve the quality of research and imbibe research culture on the campus?**

- About 5%of the faculty members have utilized Study / Academic leave for their activities towards research.
- The college has a policy to depute faculty to pursue their Ph.D at reputed Universities/IITs/ NITs enabling them to promote research culture in the campus.
- The institute also provides academic leave facility to the faculty who are required to attend the courses at the respective universities where they are doing their Ph.D under external registration to fulfill the prerequisites.

**The following members are deputed on sabbatical/Academic leave**

S.No	Name	Dept& Designation	Institute of study
1	Prof. P V. Gopal Singh	CHEM- Prof.	AU, Vizag
2	Mr. P. Ramesh	CHEM-Assoc. Prof.	AU, Vizag
3	Mr. GVSK Reddy	CHEM-Assoc. Prof.	AU, Vizag
4	Mr. J. Lakshmanarao	CHEM-Asst. Prof.	IIT Kharagpur
5	Mr. A Varaprasad	Asst. Prof.- Civil Dept	IIT Hyderabad
6	Dr. P.Satheesh	CSE, Assoc. Professor	ANU, Guntur
7	Mr. C.VeerabhadraRao	CSE, Assoc. Professor	JNTU –K
8	Dr. G.Suvarna Kumar	CSE, Assoc. Professor	JNTU –K
9	Mr. B.S.Vamsi Krishna	CSE, Sr. Asst. Professor	JNTU –K
10	Mr. P.SrinivasaRao	CSE, Sr. Asst. Professor	JNTU –K
11	Mr. B.Srinivas	CSE, Asst. Professor	JNTU –K

12	Mr. M.ChandraSekhar	CSE, Asst. Professor	JNTU –K
13	Dr. R.Ramana Reddy	ECE, Professor	AU, Vizag
14	Dr. M.Satyanarayana	ECE, Assoc. Prof	AU, Vizag
15	Dr. M.SunilPrakash	ECE, Professor	AU, Vizag
16	Dr. ShaikMastanVali	ECE, Professor	AU, Vizag
17	Mr. T.A.N.S.N.Varma	ECE, Asst. Prof.	AU, Vizag
18	Smt. D.Ramadevi	ECE, Assoc. Prof	AU, Vizag
19	Smt. V.Lavanya	ECE, Professor	AU, Vizag
20	Mr. P.Surya Prasad	ECE, Assoc. Prof	JNTU-K
21	I.KranthiKiran	EEE, Assoc. Prof	JNTUH
22	P.A.MohanaRao	EEE, Asst. Prof.	JNTUK
23	Ch. BhavaniSankar	EEE, Asst. Prof.	JNTUK
24	I Sudhakar	MECH, Assoc. Prof.	AU, Vizag
25	K Praveen	MECH, Assoc. Prof.	AU, Vizag
26	M K Naidu	MECH, Assoc. Prof.	AU, Vizag
27	B A Ranganath	MECH, Assoc. Prof.	AU, Vizag
28	Dr S SrinivasaRao	MECH, Assoc. Prof.	AU, Vizag
29	M Anil Prakash	MECH, Assoc. Prof.	JNTU –K
30	B MadhavaVarma	MECH, Asst. Prof.	JNTU-A
31	G Rajesh	MECH, Asst. Prof.	JNTU-A
32	Mrs. K Sobha Rani	IT – Assoc. Prof.	JNTU –K
33	Mrs. V Jtoyhi	IT – Assistant Professor	AU, Vizag
34	D.Ravi Kumar	S&H-MAT, Asst. Prof	NIT-Rourkela
35	K.V.Ratnakumar	Asst. Professor	AU, Vizag
36	SarahaKamalakumari	Asst. Professor	AU, Vizag

- The facility given by the college has contributed to improve the quality of research in the following ways
- Enhanced their knowledge levels in research activity and teaching learning process
- Made the teachers to apply and get research projects from various state and central government organizations.
- Obtained eligibility status for establishing Research Centers in various departments of the college.
- With the expertise in the areas of their specialization, the laboratories are modernized to carry out research activity.

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

- Research projects taken up by the college are mostly of national relevance
- Both post graduate and under graduate students give preference to take up projects related to Industrial and society needs.
- The following are some of the projects/programmes taken up for transfer of relative findings of research to students and faculty of other colleges.
- Establishment of Microsoft Innovation Centre in the college to organize Microsoft Certification programmes.
- Training on process equipment design in Chemical Engg by M/s.

- Simtech, Simulations, Hyderabad
- To extend technical assistance in production of Ginger oil to Gram Tarang foods [ A unit of Centurion University]
  - Oracle Certified Java Professional Program (OCPJP) by BOB Tech Solutions, Bangalore
  - Industry connections for internships and employment by Microsoft Ed-vantage Platinum
  - OCPJP (Java SE 6, 1.1 – IZO -851) Certification by Oracle India Pvt. Limited Bangalore
  - To provide certification course on embedded systems by Think Labs , IIT, Mumbai
  - To provide certification course on embedded systems by National Instruments, Bangalore.
  - To provide internship to students by Y2Y Signals PVT.LTD, Visakhapatnam
  - To provide certification course on embedded systems & VLSI by Wipro Technologies, PVT.LTD., Bangalore
  - To build competencies in the area of PLCs and provide student training & certification.
  - To bridge the gap between curriculum and industry requirements and make the students industry ready by SIEMENS INDIA LTD, MUMBAI (PLCs, and AC drives).
  - To impart training on mechanical design software's(WINCHILL, CREO, PLM etc..)

### 3.2 Resource Mobilization for Research

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

About 5% of total budget is normally earmarked towards research activity every year

- The College earmarks Rs.25.0 L budget every year for in house R&D
- The college also provides budget for advance software packages necessary to carryout research projects.
- Test books, reference books and hand books related to advanced topics are also added to the college library for the use of faculty and students to carry out their research activity.
- College also provides additional budget if required to the projects sponsored by external agencies to develop the labs and to organize seminars and faculty development programmes etc

#### 3.2.2 Is there a provision in the institution to provide seed money to the faculty for research? If so, specify the amount disbursed and the percentage of the faculty that has availed the facility in the last four years?

The college provides financial assistance to the faculty for completing their Ph.D. programme, presenting technical papers at national and international conferences. The institute also provides financial assistance



to students for attending industrial tours and participating in research workshops and conferences. Amounts spent towards faculty research during last 4 years

Type of support	Financial provisions to support faculty (Rs. In L)			
	2010-11	2011-12	2012-13	2013-14
Faculty attending WS /Seminars/Conferences	8.02	12.36	10.91	17.21

### 3.2.3 What are the financial provisions made available to support student research projects by students?

The following financial assistances are extended by the institution to students for research projects

- Reimbursement of TA, DA and Registration fee for participation in Technical paper presentations/ Quiz competitions.
- Transport is free for all local industry visits
- Partial reimbursement of TA for industrial tours
- Reimbursement of expenses spent on inter-disciplinary research projects

Amounts spent towards Students Research

Year	Amount Disbursed to the Students for research
2013-14	Rs. 5,99,623/- (till date)
2012-13	Rs. 21,23,205/-
2011-12	Rs. 32,48,181/-
2010-11	Rs. 11,00,853/-

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

With an objective of improving the employability skills of the students and to increase the research aptitude of the faculty, the college encourages the departments to undertake inter-disciplinary research and facilitates to organize workshops and seminars.

Department	Training Program / workshop	Duration
EEE	"Power Quality Improvement in Hybrid Energy Systems - 2014"	24th - 26th January 2014
CIVIL	Sustainable Water Resources Management	21.02.14 & 22.02.14
MECH	BARC OUTREACH PROGRAM Nuclear Energy for National development & Exhibition on BARC technologies	23.01.14 & 24.01.14
CHEM	SCHEMCON 2013 [9 <sup>th</sup> Annual Session of Students Chemical Engineering Congress]	14.09.13 & 15.09.13
ECE	Lab view on National Instruments	1 <sup>st</sup> to 3 <sup>rd</sup> November 2012



MVGR	AADHRITHA 2012	Feb 27 to 29 ' 2012
CIVIL, CHEM & MECH	Environs' 11 ( National level student symposium) & Clean Air technologies for sustainable development	30.09.2011
CIVIL, CHEM & MECH	Greentech 2011 [NATIONAL LEVEL TECHNICAL STUDENT SYMPOSIUM]	19. 01.2011 & 20 .01.2011
ECE	Workshop on Lab view of National Instruments	1 <sup>st</sup> to 3rd November 2012.
ECE	NI Lab VIEW Training Program	Aug 19 to 23 <sup>rd</sup> , 2013
ECE	FDP on Cyber Physical System Using NI Lab VIEW	10-04-2014

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

- Departments have research labs equipped with advanced equipment and softwares
- The central library facilitates a conducive research environment by subscribing the necessary national & international online journals worth about Rs.18 L every year, text books, reference books and other relevant research material.

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

YES.

The details of special grants received from industry and other agencies for developing research facility in the college are presented in the table given below

S. No	Scheme	Title of the Project	Branch	Year of Funding
1	MODROBS	Modernization of Chemical Reaction Engineering Laboratory	CHE	2012
2	MODROBS	Modernization of Fluid Mechanics Laboratory	CHE	2010
3	SEMINAR GRANT	Students Symposium, CHEVIZ - 07	CHE	2007
4	SEMINAR GRANT	Awareness of Aromatic & Medicinal Plants in Northern Andhra Pradesh	CHE	2007
5	District administration	Environmental Testing Laboratory	CHE	2004
6	MODROBS	Modernization of Networks and Security	CSE	2011
7	DST	-	CSE	2012

8	MODROBS	Modernization of Microwave Laboratory	EEE	2010
9	MSME	Adaptive Traffic Control System	EEE	2011
10	MODROBS	Modernization of electrical Machines Lab	EEE	2014
11	Seminar Grant	Power Quality Improvement in Hybrid Energy systems	EEE	20 14
12	DST	Development of artificial intelligence based decision making in open architecture control CNC	MEC	2009
13	RPS	Investigation of combustion, Emissions, and vibrations of VCR diesel engines using blended fuels	MEC	2012
14	UGC	Vibration analysis of multi fuel VCR engine using non edible oil	MEC	2014
15	UGC	Development of intelligent automated furnace handling system for carbon steels	MEC	2014
16	Institute of Engineers	AN EFFICIENT BRAIN MR IMAGE SEGMENTATION FOR EASY DIAGNOSTIC PROCESS	IT	2013
17	UGC	Surfactant Impregnated Chitosanas Adsorbent For The Removal Of Dies From Industrial Effluents	CHY	2014

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

- The college encourages faculty to get research projects from funding agencies
- Provide cash incentives for their research output to motivate.
- Provide autonomy to any principal investigators of respective projects as per the guidelines of funding authorities.
- The college also provides the necessary infrastructure, space, internet along with printers for carrying out their research activities.
- The college deposes senior faculty to faculty development programmes, skill enhancement programmes related to research projects and also provide travel grant to publish papers at conferences in India and abroad.
- The details of ongoing and completed projects and grants received during last four years are presented in table below.

**3.3 Research Facilities**

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

Many faculty members have registered for Ph.D as external research scholars of other Universities.

The college is providing the following infrastructural facilities and incentives to encourage their research.

College is equipped with excellent infrastructure facilities such as building, labs etc. It has well equipped central library facilities apart from departmental library at each department.

**Library:**

Working Hours on week days	:	8.00 AM to 6.00 PM
Working Hours on holidays	:	9.00 AM to 2.00 PM
No. of Titles	:	14848
Volumes	:	56,065
Journals - National	:	165
- International	:	19

**Digital Library**

- Central Library has been subscribing E-Journals of IEEE, ASCE, Springerlink, McGraw hill, EBSCO, Science Direct, Jgate, ASTM. About 5621 journals are accessible through online.
- College is Member of DELNET, New Delhi. It provides access to online books from DELNET member libraries and an Inter-Library loan facility provided.

**Computational Facilities**

Reprographic	:	
Canon Xerox with 15 copies/minute with zoom and enlargement facilities		
LAN	:	32 systems including digital
Internet Connectivity	:	16 MBPS – BSNL 1:1 Leased line

**Other e-Learning Resources**

Educational Multimedia	:	1370 CDs
NPTEL Web courses	:	129
Video courses	:	110
NITTR	:	275 CDs
IUCEE Material	:	22 Videos
E-books	:	2065

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

- Institute makes separate budget allocation every year to enhance the research facilities for procuring advanced equipment in laboratories beyond the syllabus curriculum and to procure necessary software.
- Institute encourages students and faculty to promote research environment and provides incentives who publish journal papers, get research projects from industry and funding agencies.
- The departments conduct seminars and workshops for inculcating research culture among students and faculty.
- The institute / departments arrange guest lectures by eminent researches from reputed institutes and industries on emerging and new areas of research.

**3.3.3 Has the institution received any special grants or finances from the industry or other beneficiary agency for developing research**

**facilities? If 'yes', what are the instruments/ facilities created during the last four years.**

YES

- Department of Mechanical Engineering received a grant of Rs.39,00,000/- in the year 2010 towards development of artificial intelligence based decision making in open architecture control CNC from DST.
- Department of Mechanical received Rs.17,00,000/- grant in the year 2012 towards the investigation of Combustion, emissions and vibration of VCR diesel engines using blended fuels from AICTE, New Delhi.
- The department of ECE received a grant of 15,00,000/- towards modernization of Microwave laboratory from AICTE, New Delhi
- Department of EEE received a grant of Rs.16,80,000/- towards modernization of Electrical Machines Lab from AICTE, New Delhi in the year 2014
- Department of EEE received a grant of Rs.6,25,000/- towards adoptive traffic control system from MSME in the year 2011
- Department of Chemical received a grant of Rs.10,00,000/- towards modernization of Fluid Mechanics Lab from AICTE, New Delhi in the year 2010
- Department of Chemical received a grant of Rs.10,40,000/- towards modernization of Chemical Reaction Engineering Lab from AICTE, New Delhi in the year 2012
- Department of Mechanical Engineering received a grant of Rs.4,00,000/- in the year 2014 towards development of intelligent automated furnace handling system for carbon steels from UGC
- Department of Mechanical Engineering received a grant of Rs.1,70,000/- in the year 2014 towards vibration analysis of multi fuel VCR engine using non edible oils from UGC
- Department of Chemistry received a grant of Rs.3,40,000/- in the year 2014 towards development of Surfcotent impregnated chitosanas adsorbent for the removal of dies from industrial effluents from UGC

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

The institute has tied up with outside research organizations/institutions as listed below to take up student collaborative projects and to promote R & D and consultancy activity.

- Establishment of Microsoft Innovation Centre in the college to organize Microsoft Certification programmes.
- Training on latest developments in Chemical Engg by M/s. Simtech, Simulations, Hyderabad
- To extend technical assistance in production of Ginger oil to Gram Tarang foods [ A unit of Centurion University]
- Oracle Certified Java Professional Program (OCPJP) by BOB Tech Solutions, Bangalore
- Industry connections for internships and employment by Microsoft Ed-vantage Platinum

- OCPJP (Java SE 6, 1.1 – IZO -851) Certification by Oracle India Pvt. Limited Bangalore
- To provide certification course by Think Labs, IIT, Mumbai
- To provide certification course by National Instruments, Bangalore.
- To provide internship to students by Y2Y Signals PVT.LTD, Visakhapatnam
- To provide certification course by Wipro Technologies, PVT.LTD., Bangalore
- To meet the Vocational training requirements and undertake mini projects and pilot studies to students by New Dawn Automation, Visakhapatnam(NDAV)
- To enrich their knowledge on contemporary industrial practices by SIEMENS INDIA LTD, MUMBAI
- To impart training on mechanical design software's(WINCHILL, CREO, PLM etc..)

### 3.3.5 Provide details on the library/ information resource centre or any other facilities available specifically for the researchers?

#### Library & Information Centre

- Total area of the library (in Sq. Mts.) : 767 Sq.Mts
- Total seating capacity : 250
- Working hours (on working days, on holidays, before examination days, during examination days, during vacation) :
  - On working days : 8.00 AM to 6.00 PM
  - On Holidays : 8.00 AM to 4.00 PM
  - On Examination days : 8.00 AM to 8.00 PM
  - During Vacation : 8.00 AM to 4.00 PM
- Layout of the library (individual reading carrels, lounge area for browsing and relaxed reading, IT zone for accessing e-resources)

**Ground Floor:** Text book section, Reference section, Circulation section, Journals section, News Papers and Periodicals section, Back Volumes, Server Room, Back Volumes and Media Resource Centre

**First Floor:** Text book section, CD/DVD Videos display, Reading Rooms, e-Learning center, discussion rooms, Book bank for SC/ST, Reference section

#### Digital Library

- Central Library has been subscribing **E-Journals of IEEE, ASCE, Springer link, McGraw hill, EBSCO, Science Direct, J-gate, ASTM. About 5621 journals are accessible through online.**
- College is Member of DELNET, New Delhi. It provides access to online books from DELNET member libraries and an Inter-Library loan facility provided.

#### Computational Facilities

Reprographic	:Canon Xerox with 15
copies/minute with zoom and enlargement facilities	
LAN	:32 systems including digital
library	
Internet Connectivity	:16 MBPS – BSNL 1:1 Leased

line

**Other e-Learning Resources**

Educational Multimedia	:1370 CDs
NPTEL Web courses	:129
Video courses	:110
NITTR	:275 CDs
IUCEE Material	:22 Videos
E-books	:2065

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

- The departments have Departmental Advisory Committees (DAC) comprising the eminent educationist/industrialist as members. The suggestions of these committees are incorporated in the operationalization of the curriculum.
- MOUs are signed between the departments and related industries/research organization for effective transfer of technical knowledge and know how.
- Workshops/lectures are arranged by tying up with the industries/research organizations on the latest curricular subjects.
- The departments take the help of Alumni Association and Training & Placement cell to maintain professional relations with the representatives of industry. The HR managers of various companies are invited to the college campus to interact with the students and faculty.
- The students of various departments of the college are taken for industrial visits from time to time to keep them abreast of the latest developments in the industry.
- A few members of the college faculty are actively involved in the curriculum design and development whenever the university proposes the new curriculum. The college also conducts review meetings on the latest curriculum and passes on the suggestions/comments of the faculty to the University for necessary modifications.
- The faculty members are encouraged to submit research proposals to various Government research organizations/public and private sectors to receive the research grants and promote research activities in the departments.
- The college is a member of various professional bodies such as SAE, CSI, IETE, IEEE etc. and organizes workshops in association with these bodies on latest curriculum subjects

**3.4 Research Publications and Awards**

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

- **Patents obtained and filed (process and product) :**

S.No.	Product/Process Name	Name of the faculty	Year
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1	Formation of Stable salt of Anacardic acid from cashew nut shell liquid	Dr. Ch. V. Subbarao Prof of CHEM	2012
2	Sodium vapor lamp dimming technology	Mr. K. S. Ravi Kumar Assoc. Prof of EEE	2014

- **Original research contributing to product improvement:**
- **Research studies or surveys benefiting the community or improving the services:**
- **Research inputs contributing to new initiatives and social development**

The department of Mechanical Engineering was sanctioned a DST project worth Rs. 38.72 lakhs for the development of a performance enhancement system for an open architecture controlled machine tool. The objective in taking up this project was to develop a machine tool with an advanced, artificial intelligence based controller that would be able to monitor the thermal status of the machine and make compensation so that the accuracy of the machine can be maintained. In this project, a standard 3-axis VMC has been fitted with a commercial, open architecture controller that operates on the Ethernet protocol. The machine tool was fitted with 3 Ether CAT enabled servo drives and one Profibus spindle drive with the I/O modules for temperature measurement, linear position measurement etc. in addition to the standard modules. A commercial workstation was connected to the machine and executes both the tasks of program computation and real-time servo control. This workstation is also installed with solid modeling software (Pro/E), *Mat-lab* and a commercial computer aided manufacturing package (Edge CAM). Motion control is executed by Twin CAT, a controller software system for personal computers (PC) that transforms every compatible PC into a real-time motion controller with multiple programmable logic controllers, NC axis control and a control station. In this project, an attempt is made to present the concept of an intelligent automation approach to manufacturing that seeks to integrate intelligence-based decision making tasks into a conventional vertical machining center. Despite major advancements in the field of CNC machine tools, there is great scope for the development and integration of artificial intelligence based automated decision-making approaches that can execute critical control tasks without human intervention. This project was an attempt to address this requirement. Machine tools in the current manufacturing environment in industry do not have this capability and hence there is scope for significant increase in industrial productivity through the implementation of such a system.

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

NO.

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



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

**Details of Publications / Paper presentations / Book publications by the faculty during last 4 years.**

S. no	Activity	During			
		2013 -14	2012-13	2011-12	2010-11
1	Publication by faculty	173	194	134	95
2	Papers published by faculty & students	123	116	248	231
3	No. of publications listed in International Data Base	121	100	52	38
4	Monographs	0	0	0	0
5	Chapter in Books (Manuals)	0	1	0	0
6	Books edited	0	0	0	2
7	Books with ISBN / ISSN	7	4	1	1
8	Citation Index	4	3	4	4
9	SNIP / SJR	0	0	0	0
10	Impact Factor	10	11	2	4
11	H-Index	6	6	3	1

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

**Research Awards received by the faculty**

- Dr. K.V.L.Raju - Andhra University Gold Medal for Best Thesis Award, In Mechanical Engineering
- Mr. S V A R Sastry, Sr. Asst. Professor of Chemical Engineering received UNIVERSITY BEST TEACHER AWARD [2008 -13] from JNTUK.

**Recognition received by the faculty from reputed professional bodies and agencies, nationally and internationally**

- Prof. Ch. V. Subbarao, Professor of Chemical Engineering was nominated **Marquis WHO'S WHO IN THE WORLD** [31<sup>st</sup> edition]
- Dr. B. Sarvarao, Associate Professor of Chemical Engineering [Co-ordinator Student activities] received "**BEST STUDENT CHAPTER AWARD**" from Indian Institute of Chemical Engineers [IICHE] FOR



THE YEAR 2013”

- Mr. S V A R Sastry, Sr. Asst. Professor of Chemical Engineering received **UNIVERSITY BEST TEACHER AWARD** [2008 -13] from JNTUK.
- Mr. S V A R Sastry, Sr. Asst. Professor of Chemical Engineering was nominated **Marquis WHO’S WHO IN THE WORLD** [ 31<sup>st</sup> edition]
- Mr. S V A R Sastry, Sr. Asst. Professor of Chemical Engineering was nominated in **2000 OUTSTANDING INTELLECTUALS of 21<sup>st</sup> century** from International Biographical Centre, Cambridge, UK
- Mr. S V A R Sastry, Sr. Asst. Professor of Chemical Engineering was nominated **100 BEST EDUCATORS of 2013**, from International Biographical Centre, Cambridge, UK
- Mr. S V A R Sastry, Sr. Asst. Professor of Chemical Engineering was nominated for **LEADING PROFESSIONAL AWARD IN CHEMICAL ENGINEERING** from International Biographical Centre, Cambridge, UK

**Incentives given to faculty for receiving state, national and international recognitions for research contributions.**

- Staff members are encouraged to attend seminars, conferences, workshops and short-
- term courses by providing TA/DA and registration fee.
- Necessary books and journals are provided for those who are pursuing research. Sufficient freedom is allowed to the staff for innovation and reforms in the teaching and learning process.
- Faculty members are sanctioned study leave for pursuing Ph.D. programme in premier Institutions like IITs and NITs.
- Faculty members are encouraged to take up developmental activities such as book-writing, paper publication, research projects and conducting student activities.
- All the teachers with M. Tech/ Ph.D are encouraged to apply for financial assistance to any research funding agency (UGC, AICTE DST, BARC etc).
- The administration encourages intra-departmental and interdepartmental R&D and Consultancy projects by providing the required amenities and needs.

**Incentives for Faculty :-** The following incentives are sanctioned for the faculty

- EPF, Group Insurance, & Medical Insurance to all the staff.
- Free transport for non-teaching staff
- Cash Incentives for Research Publications.
- Basic Salary for the period of full time Ph.D.
- Reimbursement of fees in case of part time Ph.D.
- Reimbursement of TA, DA & Registration Fee for participation in Seminars/Workshops/Refresher Courses
- Sponsorship for conferences outside India subject to a maximum amount of
  - Rs. 10,000/- for presenting paper without attending
  - Rs. 15,000/- for presenting paper in person
  - Rs. 25000/- for chairing the sessions
- Professional Society memberships (2)- Free for HODs

- 50% membership fee reimbursement for the rest of the faculty.

### 3.5 Consultancy

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

- The institution has R&D Cell to collaborate with industries and outside organizations and to take up consultancy works.
- Civil Engineering department has arranged training programmes to the students on technical skills who wish to choose their career as consultants
  - Training on carrying out site surveys using total station
  - Training on Auto-CAD to prepare building drawings and structural detail drawings
  - Training on soft wares like STAAD-PRO & ARC GIS etc
  - The institute has some faculty with high level experience in Industry. We are leveraging their services not only for academics, but also to enhance student employability.
- Dr.A.L.Rao, Ex-COO, Wipro Technologies is on board and providing strategic direction to our services and brining immense value to the organization
- Mr Sita Rama Raju Pusapati, Head of the Department, CSE, worked for D.E. Shaw for more than 10 years and served as Associate Director. He was responsible for back office IT operations.
- Mr C.Veerabhadra Rao, appointed as Associate Professor, CSE Department, worked for AT&T Dallas, Texas Instruments and Oracle Corporation. He has an industry experience of over 12 years. He served as Principal Technical Architect during his tenure with AT&T and as Principal Member of Technical Staff with Oracle Corporation.
- S. Ravi Shankar, who worked for Wipro Technologies for more than 12 years, was appointed as Innovation Consultant and Heading MVGRCE Innovation Sandbox. During his stint with Wipro, he worked as Program Manager, associated with TMTS, Securities Verticals of Wipro Technologies. He worked with Microsoft, Nokia, and other Technology customers of Wipro.
- A.S.V.Jayasri, worked with Wipro for more than 10 years, appointed as Associate Professor, CSE Department and helping us in executing live projects under campus-development center. During her stint with Wipro, she was working with Nortel, HP, and Microsoft accounts.
- L. Raghava Kumar, worked with Wipro for more than 3 years, joined us as Training and Placement Officer. During his stint Wipro, he worked with Epson, KVH and other telecom accounts. He also worked as Consultant and developed frameworks in Project Management Office, EGI consulting for Ericsson Global India.
- Mr K. Ajay, worked for TCS as Assistant systems engineer. During his stint, engaged with General Electric Account for more than 4 years. Currently he is associated with Mechanical Engineering Department.
- Mr. B.Rameshraju worked for RITES and is currently associated with

Civil Engineering Department.

- Mr. S.Muralisagar Varma worked with GE, Bangalore and is currently associated with Civil Engineering Department.
- The institution has R&D Cell has representatives from each department who collaborate with government organizations, industries and research organizations and invite eminent personalities to the institute for interaction and knowledge sharing with faculty and students.
  - R & D cell Dean and all the members, meeting minutes, Details of eminent personalities who visited MVGR)
- Based on the interactions with external agencies, SWOT analysis is done. (In particular, the strengths and weaknesses are identified).
- With the help of the report developed during industry interactions, the institute tries to utilize its strengths by offering consultancy and advisory services to them.
- Training programs are organized to practicing engineers based on the requirements posed by the respective industry as and when there is a specific requisition.

#### Details of Collaborations

- **Community** Masons around, Vizianagram (training by Civil Dept.) and general public (awareness regarding road safety), Prema samajam.
- **Local bodies** GVMC, VUDA, Vizianagaram Municipal Corporation. Vizianagaram Traffic police Department
- **State** A.P (Traffic) POLICE DEPARTMENT, AP Pollution Control Board, Andhra Cricket Association
- **National** ACC Cements, Reddy labs
- **International** IUCEE

**Campus- Offshore Center:** MVGR has tied up with Bob Tech Solutions, a Bangalore based software Development Company to execute live customer projects in our campus. Currently our CSE department is working on two live projects of an airline company based out of Dubai.

**Consultancy in Civil Department:** Students are involved and thereby exposed to all the consultancy works taken up by the Civil Engineering department. Visits are arranged to students to sites where our clients are executing construction projects.

- To nurture excellence among students and faculty in the field of computer applications, laboratory testing to cater the needs of customers and skills in developing technical models etc.

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

The following facilities are provided to encourage faculty to take up consultancy works at institute level.

- Faculty can unconditionally utilize institute infrastructure (computers, printer, library, softwares, and laboratories etc.) for doing consultancy projects.
- Any equipment or software necessary for design of structures or other

- specific consultancy works (may not be required as per curriculum) and can give returns in 3 to 4 years is readily approved
- Budget allocations are made for the laboratory equipment involved in consultancy are calibrated from time to time
  - The institute gives freedom in executing consultancy works to concerned people involved and treats their absence without inconvenience to pre-assigned responsibilities as during this period as On Duty subject to a maximum of 15 per year. It provides free transport facility to faculty and staff involved and reimburses all their expenditure during their trails or execution of the works.
  - Unlike remuneration distribution policies in standard institution, major share of consultancy remuneration is awarded to personnel involved and institution's share is only nominal (15 % to 30 %). It is only to take care of working expenditures.
  - The institute sponsors faculty to attend important workshops and seminars arranged by the leading technology consultants in relevant fields.
  - The institute offers monetary benefits to faculty involved in consultancy as per the college policy

#### **Advocating and publicizing the available expertise**

- Institute and department level brochures are prepared with information related to strengths and expertise related to areas in which individual departments can offer consultancy.
- Faculty with industrial background continues to interact with their alma mater and hence the strengths are discussed.
  - Industries often have an idea of the expertise that MVGR faculty have during their interactions in seminars, conferences and workshops
  - The college provides the following facilities to encourage faculty to take up consultancy works at institute level
  - To procure necessary equipment in labs and to promote consultancy activity
  - To procure relevant software needed for design of structures and for obtaining the results on projects taken up under consultancy
  - Calibration of electrical meters
  - Consultancy for conduct of online examinations
  - Third party inspection services to Govt. buildings & projects

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

The following facilities are provided to encourage faculty to take up consultancy works at institute level.

- Faculty can unconditionally utilize institute infrastructure (computers, printer, library, softwares, and laboratories etc.) for doing consultancy projects.
- Any equipment or software necessary for design of structures or other specific consultancy works (may not be required as per curriculum) and can give returns in 3 to 4 years is readily approved
- Budget allocations are made for the laboratory equipment involved in

- consultancy are calibrated from time to time
- The institute gives freedom in executing consultancy works to concerned people involved and treats their absence without inconvenience to pre-assigned responsibilities as during this period as On Duty subject to a maximum of 15 per year. It provides free transport facility to faculty and staff involved and reimburses all their expenditure during their trails or execution of the works.
  - Unlike remuneration distribution policies in standard institution, major share of consultancy remuneration is awarded to personnel involved and institution's share is only nominal (15 % to 30 %). It is only to take care of working expenditures.
  - The institute sponsors faculty to attend important workshops and seminars arranged by the leading technology consultants in relevant fields.
  - The institute offers monetary benefits to faculty involved in consultancy as per the college policy
  - By reducing the workload of faculty involved in major consultancy works
  - By sponsoring the faculty to attend important workshops and seminars arranged by the leading technology consultants in relevant fields.
  - Offering monetary benefits to faculty involved in consultancy as per the college policy
  - Providing free transport facility to faculty to make field and industrial visits and meet the consultancy demands.
  - Faculty members are permitted to utilize the infrastructure and lab facility to perform the laboratory tests and use of software for solving and analyzing their consultancy projects.

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

**Major consultancy Services taken up and the revenue generated during last 4 years**

S. No.	Agency	Nature of Work	Year	Amount Received (Approx. in Rs.)
1	GVMC	Design of Storm water drainage system for sheelanagar area	2011	4.9 L
2	Premasamajam	Design of hostel building for Blind students	2012	Under request, done free of cost
3	Municipal Corporation, Vizianagaram	Third party quality control for all the works undertaken in Vizianagaram.	2012 to till date	1.5 L
4	AP Housing Board	Soil tests and Tests for Quality Control,	2013 to 2014	0.25 L

5	Rural Water supply	Soil tests and Tests for Quality Control	2013 to 2014	0.25 L
6	VUDA	SPT for soil at site and Design of small bridge at Vizianagaram	2014	1.7 L
7	Traffic police, Vizianagaram	Accident studies and road improvement measures for critical junctions in Vizianagaram	2013 - 2014	Under request, done free of cost
8	AP Housing Board	Design of water distribution network - Jonnavalasa	2014	Under request, done free of cost
9	Dept. of Mechanical Engg.,	Testing of Cement Bricks Chaitanya Engg. College (MOS Lab)	2014	Free Service
10	Dept. of Mechanical Engg.,	Testing of Cement Bricks T. T. Devastanams (MOS Lab)	2013	Free Service
11	Dept. of Mechanical Engg.,	Testing of Gas Cylinders M/s SahoowalaIndustries, Vsp	2013	Free Service
12	Dept. of Mechanical Engg.,	Testing of Cement Bricks & Iron (MOS Lab) K.A.P Raju, Contractor	2012	Free Service

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

The policy on sharing the income generated through consultancy is given in the college quality document as follows

The policy on sharing the income generated through consultancy is discussed and approved by R & D cell of the college. For the sake of sharing the works are classified into 3 classes and their details are as follows.

Class	Description	Staff involved (S): Institution (I) (Share after deducting expenses )
CLASS A	Works involving testing the materials/items using laboratory equipment and machines.	70 : 30
CLASS B	Works using faculty expertise for analysis, design, programming etc.	85:15

CLASS C	Consultancy works using high quality software's (costing more than 10 L per user) available in the college.	60:40
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If

A = CONSULTANCY REMUNERATION RECEIVED

B = EXPENDITURE INCURRED ON THE WORK

I = % INSTITUTION SHARE INVOLVED

S = % STAFF SHARE INVOLVED

THEN

$C = (I/100) \times (A - B)$

AND

$S = A - B - C$

Once a principal coordinator is assigned for a work by HOD based on area of the work and expertise of the faculty, he has the prerogative of the breakup of the share (S) to all those involved in the project.

The Consultancy amounts received will be generally deposited in College R & D account and are disbursed to faculty and staff in accordance with the above breakup policy once in a year generally in the first week of June every year. The balance amount in the form of institute share is generally utilized to maintain and develop the library and laboratory equipment by procuring advanced equipment and software necessary to conduct experiments related to research and also to arrange workshops and seminars on consultancy activities.

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

#### 3.6.1 How does the institution promote institution-neighborhood-community network and student engagement, contributing to good citizenship, service orientation and holistic development of students? NSS UNIT

The institute has NSS Unit with a total strength of 175 members and affiliated to JNTU, Kakinada and organizes many social service and community development programmes and inculcates the importance of social responsibility and service in the minds of students.

The various activities conducted by the NSS Unit are listed out in the following:

1. Nearly 26 blood donations camps were conducted in the campus, in association with rotary club, Red Cross society, lions club and District Government hospital, and more than 2900 students and volunteers donated their blood in these camps. The NSS unit of the college achieved the highest donors' award in the year 2009, which was given away by the district collector.
2. Special campaign programs 10 in number were conducted in the adopted village Chintalavalasa. During these camps many a number



- of medical camps, veterinary camps, awareness programs on health, education, women and child care, employment skills etc. were conducted.
3. A blood donation camp was conducted on 03.03.2001 on the occasion of MASAS founder's day. About 100 students, volunteers and staff donated their blood on that day.
  4. An awareness program was conducted on HIV/AIDS on 01.12.2002.
  5. An awareness rally was conducted on literacy in the adopted village Chintalavalasa on 05. September 2005.
  6. The NSS volunteers distributed cloths and fruits to the orphans and poor children of the voluntary organization PremaSamajam, Vizianagaram on 02.10.2007.
  7. A plantation program was conducted in the campus on 02.07.2008 during the Vanamahotsav week (01 July to 07 July).
  8. Independence Day celebrations were conducted on 15.08.2009. The NSS volunteers have arranged and coordinated some cultural activities regarding patriotism.
  9. A mega Blood Donation Camp was conducted in the campus in association with the Red Cross Society, Vizianagaram on 03.03.2010. In this camp, 188 members from students, volunteers and staff donated their blood for the noble cause.
  10. An awareness rally was conducted on 01.12.2010 in the adopted village Chintalavalasa. The students were actively participated and educated the village people on AIDS.
  11. A special camp was conducted during 18.02.2010 to 24.02.2010 in Chinathalavalasa.
  12. Medical camps were conducted on Ophthalmology, Gynecology, pediatric and general checkup during the special camp 18.02.2010 to 24.02.2010.
  13. A legal awareness program was conducted on 19.02.2010 at Chintalavalasa village. This was conducted in association with District Legal Services Authority. The senior civil judge Sri. L. Appa Rao addressed the villagers on various legal acts.
  14. An awareness program was conducted on self-employment schemes to the rural youth. This program was conducted on 24.02.2011, in association with District Self-employment Training Center, Vizianagaram.
  15. A special camp was conducted for 7 days (from 2.1.2012 to 8.1.2012) at Akulapeta, DenkadaMandal, Vizianagaram. This program included Medical camps, Eye checkup camps, Awareness program on health, Education, HIV/AIDS, Legal awareness e.t.c. About Rs.12,000/- medicines were distributed to the village people as well as to the village domestic animals.
  16. An Eye check-up camp was conducted on 05.02.2012 in association with SANKAR FOUNDATION, Simhachalam, Visakhapatnam. A group of 25 villagers were sent to the hospital for surgery each cost of Rs.15,000/- .
  17. PULSE POLIO IMMUNIZATION (19.2.2012): A team of 25 students have participated in this activity. They went to 5 nearby villages and brought awareness among the villagers. They also assisted the medical staff at the immunization centers.
  18. Books donation to school children at Chintalavalasa village on



07.07.12.

19. We have distributed 80 smokeless chulas for rural people with the help of NEDCAP at PEDADA village Denkadamandal on 16.10.2012.
20. We have organized a silent rally at Vizianagaram from Port to Collector Office against “Women Social Issues” with the help of Women Empowerment Cell on 02.01.13.
21. We have conducted various completions to sharpen & enrich students’ personality with the help of Cultural Committee and also distributed prizes on the eve of National Youth Day i.e. 12.01.13.
22. Blood Donation Camp was conducted in the campus in association with the Red Cross Society, Vizianagaram on 02.03.2013. In this camp, 207 members from students, volunteers and staff were donated their blood for the noble cause.
23. Health Camps were organized at Akulapeta Village from 04.02.13 to 09.02.13 with the Help of MIMS for the treatment of diseases of ENT, respiratory problems, arthritis, pediatrics & gynec health problems and have 225 people were utilized these services.

#### **Entrepreneurship cell -Facility, management and impact**

- MVGR College of Engineering proposed to set up an ED cell within the campus. The proposal was successfully through the AICTE Norms, and has been approved (F.No: 8022/RID/EDC (71)/2008-09). Additionally, AICTE has extended funding of INR 7 L to the campus for the activities of the newly established ED Cell for the duration of three years beginning from April, 2009 and going through to April 2012.
- In line with the objectives of the EDC, specifically, incubation—as recommended by AICTE, the college has set up separate infrastructural facilities including seminar hall, systems, library exclusively housing literature relevant to entrepreneurship. Further, a committee at the institution level consisting of members of the faculty with aptitude from all the departments was constituted to periodically meet, discuss and recommend activities that would help the budding students equip themselves with information and knowledge related to entrepreneurship.
- The institution also constituted an Advisory board consisting of members drawn from District Industries Center, NABARD, MSME, APITCO Ltd., Lead Bank and Naval Science and Technological Laboratory, in addition to representatives from the institution. Since its inception, the cell effectively leveraged the services of various governmental and nongovernmental executives to contribute to EDC.

#### **NCC UNIT**

- NCC Unit was started in the institute in the year 2003, under 2(A) CTR (2 Andhra Compo Technical Regiment). The NCC committee constitutes the principal Dr.K.V.L. Raju as the chairman, Mr.A. RamachandraRaju, NCC officer as the convener. The total enrollment of the NCC Unit is 100 and this is a two years program for a cadet. This institution is providing refreshments to the cadets during periods of NCC

activate .The NCC has its own regular time table to make the students participate periodically in practice/drill sessions. The cadets are regularly participating in NCC camps and securing NCC B and NCC C Certificates. Every year, the NCC cadets are undergoing Combined Annual Training Camp (CATC) at 2(A)CTR, Visakapatnam . The INDEPENDENCE DAY and REPUBLIC DAY Parades were regularly conducted in the college campus. More than 250 cadets have secured both B and C certificates up to 2011.

- A Cancer awareness rally was conducted on 07-11-2009, in the village Chintalavalasa. The cadets actively involved in bringing the awareness in the village people.
- An AIDS awareness rally was conducted on 01-12-2009 in Chintalavalasa village.
- A blood donation camp was organized in the campus on 03.03.2010, in association with the NSS unit of this institution.
- An anti-tobacco rally was conducted on 31.05.2011 at 2(A) CTR, Visakhapatnam.
- A rally was conducted on 22.04.2011, the world earth day at 2(A) CTR, Visakhapatnam.

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

- To create awareness in students about the need of enrolling in electoral in voting during general elections and also to motivate the public on usage of Vote Right.
- To organize seminars develop leadership quality among the students and unemployed youth.
- To organize seminars about social responsibility of citizens
- To organize health awareness camps for public (AIDS awareness programmes) and Blood Donation camps through NSS unit of the college
- Conducting free classes to school children on simple basics of mathematics and sciences
- Creating awareness about hygienic environment and pollution free climate
- To arrange seminars on Right to Information Act

The college is having FYFP(For the Youth For the People) unit with a vision:

- To create awareness among the students about the society around them.
- To provide annual writing aid for the poor children.
- To provide primary education for the village children.
- To create awareness among the women about their health care.
- To create some change in the society and work against evil things in the society.
- To build the leadership skills and teamwork among the students

Some of the activities organized by FYFP are:

**Project kitab**

Project kitab is a unique idea by students of MVGR, to collect the paper used by students, recycle them and distribute to the needy

**Primary is education**

A major project on the present situation of education system in the society was planned under FYFP. As a part of this some of the members have met some eminent personalities who have done a renowned work in the field of education.

- Every Sunday- to 2 interior villages.
- Over 70 children were taught.
- Constant visits to government schools – gave tips for 10<sup>th</sup> class examinations.

**Chula(smoke less stove) distribution**

In the process of making a model village FYFP of the college is trying to promote the village to use non-conventional energy resources. As a part of it one day campaign was conducted at pedada village on 31st May 2013. Keeping this in view FYFP has coordinated with the “NED-CAP” and distributed chulas to the 75 families in the village.

**Cloth collection**

MVGR college of engineering has arranged a prestigious event named “AADHRITHA”. As a part of this event FYFP has organized cloth collection for which the response was tremendous. People from various parts of the state had brought their old clothes. So these clothes were given to an orphanage in a village named mandala *vikalangula samkshema sangham* at chythapuram on 13<sup>th</sup> May 2012

**Bhoghapuram fire accident**

- 31 houses in chinaravada, an interior village near Bhoghapuram have been burned out due to short circuit at 11 a.m. On Tuesday.
- Cloth distribution
- Utensils distribution
- 3 pairs of clothes were given to every member of each family including blankets and towels on 19-02-2014

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

- The college conducts parents meets, collects feedback from parents every year and suggestions will be taken.
- The college takes exit feedback from outgoing batch students, analyses and take appropriate measures for further improvement.
- The College Governing Body (GB) take decisions and policies keeping in view the perceptions of all the stake holders.
- A registered Alumni association of the college has been established which helps the institution in extending their activities like delivering lectures on placement opportunities and provide financial support to meritorious poor students; thus contributes towards overall performance and quality of the institution.

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

With the rapid depletion of fossil fuels, nations all over the world are leaving no stone unturned in their search for alternative and sustainable sources of energy. Nuclear energy has long promised to be a very reliable and sustainable source of energy that has great prospects in being harnessed for multifarious purposes such as power generation, propulsion, defense etc. However, the occurrence of major catastrophes like the Three Mile Island Disaster, the Chernobyl Disaster and the recent Fukushima Disaster have cast a shadow over the use of nuclear energy for driving and supporting the needs of humankind. It is in the light of the above scenario that Bhabha Atomic Research Centre (BARC) conducted an Outreach Program at MVGR College on January 23 & 24, 2014 to spread awareness among the scientific community as well as the general public on various aspects of the harness and use of nuclear energy. We are very fortunate that BARC has selected MVGR College of Engineering for conducting the Outreach Program in this region. The program saw on the one hand invited lectures by eminent scientists from BARC, NPCIL and NFC including the former Chairman of Atomic Energy Commission, Dr. S. K. Banerjee on various technological aspects related to nuclear energy as well as an exhibition on BARC technologies for school students and general public.

**3.6.5 How does the institution promote the participation of students and faculty in extension activities including participation in NSS, NCC, YRC and other National/ International agencies?**

**NSS UNIT**

- The College has a NSS Unit with a total strength of 175 members, affiliated to JNT University Kakinada, Kakinada. The unit was established with an objective to cultivate the attitude of social service in the minds of students and to make them into responsible citizens.
- The members of NSS unit and the faculty participate in special and regular camp activities every year.
- Students participate in NSS Youth Fests in JNTU and other colleges.

**NCC UNIT**

- NCC Unit was started in the institute in the year 2003, under 2(A) CTR (2 Andhra Compo Technical Regiment). The NCC committee constitutes the principal Dr.K.V.L. Raju as the chairman, Mr.A. RamachandraRaju, NCC officer as the convener. The total enrollment of the NCC Unit is 100 and this is a two years program for a cadet. This institution is providing refreshments to the cadets during periods of NCC activate .The NCC has its own regular time table to make the students participate periodically in practice/drill sessions. The cadets are regularly participating in NCC camps andsecuring NCC B and

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- An anti-tobacco rally was conducted on 31.05.2011 at 2(A) CTR, Visakhapatnam.
- A rally was conducted on 22.04.2011, the world earth day at 2(A) CTR, Visakhapatnam.

**3.6.6 Give details on social surveys, research or extension work (if any) undertaken by the college to ensure social justice and empower students from under-privileged and vulnerable sections of society?**

College undertakes many extension activities under NSS & NCC units. The activities conducted in the academic year 2013-14 are listed below:

Name of the program / activity	From	to
Awareness Program on Role of Youth in Village Development	17/04/13	17/04/13
Awareness Program on Adoption of Disabled children & Distribution required study material & Free lunch arrangements to Deaf & Dumb Children	17/06/13	17/06/13
Donation of books to Poor Students	7/7/2013	7/7/2013
Awareness Program on Rural Education & Distribution of School Uniform to poor children	17/07/13	17/07/13
Independence Day Celebrations	15/08/13	15/08/13
Teachers Day Celebrations	5/9/2013	5/9/2013
World Peace Pledge	21/09/13	21/09/13
Awareness Program on Adult Education	19/11/13	19/11/13
Awareness Program on Library & It's utilization	20/11/13	20/11/13
Blood donation camp - 15th Birthday celebrations of Swami Vivekananda	10/1/2014	10/1/2014
NSS SPECIAL CAMP at Venkannapeta&chittigunkalam villages	27/1/2014	1/2/2014
Distribution of utensils & clothes - Chinaravada - Bhogapuram	21/3/14	21/3/14
Blood donation camp - MVGR 17th Annual day celebrations -	28/3/14	28/3/14

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

- The students have been developing a holistic vision about their life which is directly being proved in the HR interviews conducted. It is expressed by the recruitment experts that the students have developed considerable level of maturity complemented by social responsibility.
- The students are able to develop the experience of inculcating soft skills through the participation various field activities.

**3.6.8 How does the institution ensure the involvement of the community in its reach out activities and contribute to the community development? Detail on the initiatives of the institution that encourage community participation in its activities?**

The college is having FYFP(For the Youth For the People) unit with a vision:

- To create awareness among the students about the society around them.
- To provide annual writing aid for the poor children.
- To provide primary education for the village children.
- To create awareness among the women about their health care.
- To create some change in the society and work against evil things in the society.
- To build the leadership skills and teamwork among the students

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

Following are few outreach and extension activities:

- Imparts Training to the supervisors and Engineers of Municipality and Corporation on various modern construction activities.
- Works closely with various industries in terms of student projects in consultancy activities.
- Works closely with Red cross society in blood donation and other service activities.
- Works closely with CSI in terms of conducting various seminars of public interest.
- Works closely with district administration to meet their software and other requirements which the college can provide.

**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 institution has received prestigious award of SCHEMCON best student chapter in INDIA for the year 2013
- The institution has received prestigious award of CSI best student chapter in INDIA for the years 2011 & 2012.

**3.7 Collaboration**

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

- The following are some of the projects/programmes taken up for transfer of relative findings of research to students and faculty of other colleges.
- Establishment of Microsoft Innovation Centre in the college to organize Microsoft Certification programmes.
- Training on process equipment design in Chemical Engg by M/s. Simtech, Simulations, Hyderabad
- To extend technical assistance in production of Ginger oil to Gram Tarang foods [ A unit of Centurion University]
- Oracle Certified Java Professional Program (OCPJP) by BOB Tech Solutions, Bangalore
- Industry connections for internships and employment by Microsoft Ed-vantage Platinum
- OCPJP (Java SE 6, 1.1 – IZO -851) Certification by Oracle India Pvt. Limited Bangalore
- To provide certification course on embedded systems by Think Labs , IIT, Mumbai
- To provide certification course on embedded systems by National Instruments, Bangalore.
- To provide internship to students by Y2Y Signals PVT.LTD, Visakhapatnam
- To provide certification course on embedded systems & VLSI by Wipro Technologies, PVT.LTD., Bangalore
- To build competencies in the area of PLCs and provide student training & certification.
- To bridge the gap between curriculum and industry requirements and make the students industry ready by SIEMENS INDIA LTD, MUMBAI (PLCs, and AC drives).
- To impart training on mechanical design software's(WINCHILL, CREO, PLM etc..)

**Benefits:**

- Improved Teaching Learning Environment about 75 teachers benefited with these programmes.
- Industry oriented B.Tech and M.Tech projects.
- Improved R & D and consultancy activities
- Improved Placement & Training activity
- Exposure to students on practical and Industrial aspects through Industrial tours.

**3.7.2 Provide details on the MoUs / Collaborative arrangements (if any) with institutions of national importance/ other Universities/ industries /Corporate (Corporate entities) etc. and how they have contributed to**



**the development of the institution.**

Details of MOUs/Collaborative arrangements with the college

Dept.	Organization	Objectives	Nature of Collaboration
CHEM	M/s. Simtech Simulations, Hyderabad	To develop and build competency among faculty in chemical process equipment design and offer training to students on industry ready skills.	Design of content, handholding, to work on real life industry problems , training for joint certification.
CHEM	Dr. Reddy Laboratories, Pydibheemavaram, Ranastalam mandal, Srikakulam	To make its employees well versed with their area of work  To train its employees a and guide them for higher academic attainments	To understand workplace dynamics and collectively design and develop training modules – deploy the same for enhanced performance.  Teaching learning and mentoring
CHEM	Gram Tarang foods ( A unit of Centurion University)	To extend research assistance in the production of Ginger oil	R&D assistance
CSE	BOB Tech Solutions, Bangalore	Enhancing skills of students through real time project	To provide industry support and guidance in identifying real time problems and impart training in the development of solutions to the same.
CSE	Microsoft Ed-vantage Platinum	Industry ready skills in software development and also for internships and placement assistance.	Training on industry ready skills and facilitating industry networking
CSE	Oracle India Pvt. Limited Bangalore	To build competencies on: OCPJP (Java SE 6, 1.1 – IZO -851) Certification	To train the trainer and Train the students on industry ready skills



ECE	Think Labs, IIT, Mumbai	To build competencies in the area of embedded systems and provide student training & certification	To train the trainer and Train the students on industry ready skills
ECE	National Instruments, Bangalore	To build competencies in the area of embedded systems and provide student training & certification	To train the trainer and Train the students on industry ready skills
ECE	Y2Y Signals PVT.LTD, Visakhapatnam	To provide internship and build competencies in embedded systems	To be an active Incubation Center for embedded systems
ECE	Wipro Technologies, PVT.LTD., Bangalore	To build competencies in the area of embedded systems and provide student training & certification	To train the trainer and Train the students on industry ready skills
EEE	New Dawn Automation, Visakhapatnam (NDAV)	To build competencies in the area of PLCs and provide student training & certification	To train the trainer and Train the students on industry ready skills
EEE, ECE, MECH	SIEMENS INDIA LTD, MUMBAI	To bridge the gap between curriculum and industry requirements and make the students industry ready (PLCs, and AC drives)	To train the trainer and Train the students on industry ready skills
MECH	M/s Paramatric Technology (India) Pvt.Ltd., 4 F Phoenix Towers, No.16 Museum road, Bangalore-560025	To bridge the gap between curriculum and industry requirements and make the students industry ready (CAD, ANSYS, PRO-E, WINDCHILL tools)	To train the trainer and Train the students on industry ready skills
MECH	ZEUS NUMERIX Pvt. Ltd., Mumbai	To bridge the gap between curriculum and industry requirements and make the students industry ready	To train the trainer and Train the students on industry ready skills

MECH	M/s Kriatec Services Pvt.Ltd.,S1(IIInd Floor) New No.12 Lake Veiw Street,(Errikkarai Street) Adam bakkam,Chennai-600088	To bridge the gap between curriculum and industry requirements and make the students industry ready	To train the trainer and Train the students on industry ready skills
IT	TALENT SPRINT, Hyderabad	To provide training on JAVA programming to students	Training on industry ready skills and facilitating industry networking

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

- Industry-Institute Community interactions by inviting scientists and industrialists to deliver guest lectures and to organize workshops and seminars helped the institution in so many ways.
- Faculty and students are trained to meet the technological needs of industry and society.
- Laboratories are upgraded with advanced equipment through AICTE sponsored MODROBS funds and also with the amounts allotted through institute budgets.
- Awareness on importance of collaborative research projects and live projects for students is created by inviting eminent scientists and industrial personnel.
- Both faculty and students are benefited by organizing Industry oriented workshops wherein they gain hands-on experience and industrial exposure.

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

The faculty members periodically participate in short term courses and workshops/training programmes organized by this college and also organized by other institutes to enrich their technical knowledge and skills. Senior faculty members of the college have been playing a major role in the curriculum design of the affiliating University, JNTUK, Kakinada. The various departments conducted several workshops / Faculty Development Programmes / Training Programmes on the latest technologies and software for the benefit of the faculty. The following are the details of workshops /Faculty Development Programmes / Training Programmes organized by various departments during the last four years.

Dept	2013-14	2012-13	2011-12	2010-11
CHEM	3	1	6	6
CIVIL	4	1	3	1
CSE	3	3	7	3
ECE	2	4	1	1
EEE	1	1	2	2
MECH	2			1
IT	6	4	2	1
MBA	1	1	1	
MCA	1	1	2	

Several of the faculty members delivered guest lectures in various other colleges and also acted as Juries in various student technical paper contests organized by other colleges. Many faculty members are involved in R & D and consultancy works.

Statement showing the details of eminent researchers / resource persons visited the college during last 4 years.

S.No	Branch	Name of resource person and organization	Date/s
1	CHEM	Dr. K. Rama rao, Faculty, National University of Singapore. <u>Topic:</u> Opportunities for Chemical Engineers	24.03.14
2		Prof. KDP Nigam, IIT Delhi <u>Topic:</u> <i>Eco-friendly Technologies for Better Tomorrow</i>	14.09.13
3		Sri Praveen Saxena, Director & CEO, Blast Carboblocks Pvt Ltd, Mumbai <u>Topic:</u> successful implementation of green technologies in the Industry	14.09.13
4		Prof. ChDurga Prasad Rao (Retd.), IIT Madras Presently Professor in Chem Engg, MVGRCE, VZM <u>Topic:</u> importance of green practices in the current scenario	14.09.13
5		Dr. Rakesh, Director (R&D), Dr. Reddy's Lab, Hyderabad <u>Topic:</u> green practices in Pharmaceutical Industries	15.09.13
6		Prof. N.C.Pradhan, IIT Kharagpur <u>Topic:</u> Eco-friendly processes for the production of valuable chemicals from Hydrotreater off gas	15.09.13

7	Prof. Sri P. Vijayaraghavan, Ex-President Reliance (GJVJ Raju Endowment Lecture) <u>Topic:</u> role and responsibilities of Chemical Engineers in implementing green technologies	15.09.13
8	Mr. SURESH BABU SABBAVARAPU (B. Tech (Alumni of MVGRCE),) Marketing Manager, Agile Informatics, Singapore. M. B. A. (Marketing & International Business) from Griffith University, Australia <u>Topic:</u> "Career Post Bachelors, communication and Body language"	24.02.12
9	Dr. Vivek Dhand, Senior Knowledge Officer, (Sc-D), Center for Knowledge Management of Nanoscience & Technology, (CKMNT), HYD. Dr. S. Pallam Setty, Prof. in CSE., AU, VSP. Prof. K. M. M. Krishna Prasad, MVGRCoE, VZM <u>Topic:</u> Invited lectures on Nano Technology	17.02.12
10	Dr. I. Arun, (B. Tech (Alumni of MVGRCE),) <u>Topic:</u> " Career & Employment opportunities for Chemical Engg graduates"	17.02.12
11	Prof. S. V. Satyanarayana, Chairman BoS Chemical Engg., & Professor, Dept. of Chemical Engg, JNTU, Anantapur <u>Topic:</u> "Pervaporation: A novel separation technique"	06.08.11
12	Dr. Sridevi, Assistant Professor, Department of Chemical Engineering, IIT-Delhi <u>Topic:</u> Basic Aspects Of Chemical Engineering Related To Alkylation Reactions	18.06.10

13		Mr. Dominique Savio, Manager – operations, Krebs biotech Industries Ltd, Yelamanchili, Visakhapatnam Topic: TROUBLE SHOOTING OF HEAT AND MASS TRANSFER PROBLEMS IN BIOTECH INDUSTRIES”	10.07.10
14		Mr. Y.Ramu & Mr. P.Vinod/TCS Chennai	16.08.2013
15		Mr. Anup Roy/Cyber Q Consulting Pvt. Ltd	26.02.2014
16		Sri Gopi Kumar Bulusu/CEO, Sankhya Technologies	15.09.2012
17		Dr. A. Louise Perkins, Professor, University of Southern Mississippi, USA Dr. Sumanth Yenduri, Assoc.Professor/ University of Southern Mississippi, USA	06.01.2012 & 07.01.2012
18		P.S. Avadhani/Andhra University, Vskp	16.02.2012
19		Mr. Sharath, Software Engineer/Swecha Organization, Hyd	19.02.2011
20		Prof. G.T. Rao, GMRIT	21 <sup>st</sup> March 2014
21		Prof. N.S. Murthy, NIT Warangal	6 <sup>th</sup> March 2014
22		Prof Ganapathi Pande, Dy. Director IIT Bhu	8 <sup>th</sup> March 2014
23	CSE	Akula Naresh, Scientist – D, NSTL, VSP	28 <sup>th</sup> June 2012
24		Dr.S.Srinivas Kumar, Professor, ECE, JNTU, Kakinada	12 <sup>th</sup> September, 2012
25		Mr. Gopi Kumar Bulusu, CEO Sankhya Technologies Private Limited	15 <sup>th</sup> September, 2012
26		Rakesh, National Instruments, Bangalore	15 <sup>th</sup> February, 2013
27		Dr.Ch.Srinivasa Rao, Professor, JNTU, Vizianagaram	12 <sup>th</sup> March, 2013
28		Sri SM.Chakravarthy, Director – II, DLRL, Hyderabad.	22-12-11
29		Sri Abraham Varughese, Scientist – F, NSTL, Visakhapatnam.	23-12-11
30		Sri T.K.C.Patro, Associate Director, NSTL, Visakhapatnam.	23-12-11
31		Sri S.Shanmukha Rao, LSIRD	28-6-10
32		Dr.R.Surya Narayana Raju, CEERI	28-6-10
33		Sri K.Srikanth, NSTL	25-9-10
34		Dr.N.S.Murthy, NIT	18-3-11
35	EEE	Dr. S.Ashok, Professor, NIT Calicut	26-01-2014

36		Sri. AnandSaxena, Expert in Solar Systems	26-01-2014
37		Sri. E.Dayanand, Joint General Manager, ESSAR Steels, Visakhapatnam	25-01-2014
38		Dr. SukumarMisra, Professor, IIT, Delhi	24-01- 2014
39		Sri. M. Dharma Raju, ADE, APEPDC Ltd, Visakhapatnam	26-07-2013
40		Dr. D.Devendranath, Additional Director, CPRI, Hyderabad	20-07-2013
41		Sri. M. Ramachandra, AGM, Thermal Power Plant, Visakhapatnam Steel Plant, Visakhapatnam	19-07-2013
42		Sri. V. Ravi Shankar, Assistant Engineer – Energy Audit, APEPDCL, Visakhapatnam	12-07-2013
43		Sri. R. SaileshRao New Dawn Automation Training & Services, Visakhapatnam	21-07-2012
44		Sri. Krishnendu Roy DGM Steelplant, Visakhapatnam	18-02-2012
45		Dr. Debapriya Das Professor, IIT, Khargapur	19-12-2011
46		Dr. K.Vaishak, Professor, Andhra University, Visakhapatnam	17-12- 2011
47		Dr. D.Das, Professor, IIT, Khargapur	18-12-2011
48		Sri. N.S.P.Rao, Superintendent NTPC Simhadri, Parawada	13-10-2011
49		Prof. D.M. Vinodh Kumar Dean (Academics), NIT, Warangal	02-07-2011
50		Dr. S V L Narsimham Professor, School of Information Technology, JNTUH, Hyd	26-05-2011
51		Sri S Ganapathi Superintending Engineer (Rtd.) APTRANSCO	09-03-2011
52		Sri Pradeep Kumar Das Manager (Electrical) BHPV Ltd, Vishakhapatnam	18-08-2010
53		Sri R V RamanaRao Divisional Electrical Engineer (Rtd) APEPDCL, Visakhapatnam	13-08-2010
54		Prof.V.GPatnaik Chairman, Placements GITAM University, Visakhapatnam	31-07-2010
55		Prof.P.N.Rao	8, 9th July 2013
56	MECH	Mr.AyushNadimpalli	19.02.2013
57		Prof.P.RajuMantena	22. 12. 2012
58		Mr.S.Srikanth	13.08. 2012

59		Sri N.Subramanian,	6 <sup>th</sup> August 2011
60		Mr. Abhijeet,	2nd Feb 2011
61		Mr.Randeev	2nd Feb 2011
62		Prof.B.V.S.S.S Prasad	26.05.2013
63		Prof.N.V.Reddy,	27th May 2009
64		Prof.B.Ravi,	27th May 2009
65		DrN.RameshBabu,	30th May 2009
66		Prof.S.K.Paul,	1st June 2009
67		Prof B.Gurumurthy,	3rd June 2009
	IT	Mr.VenkatRao, Assoc Prof, CS&SE, Andhra University	15/7/2009
68		Mr. AnkitFadia,	24/7/2009
69		DrD.R.PrasadaRaju,Scientist- GAdviser Dept. of Science & Technology, New Delhi	30/7/2009
70		Mr.Sharath, SWECHA organization	19/2/2011
71		Ms.PrathimaAmonkar, Microsoft Dream Spark Yatra	18/3/2011
72		Prof. P. S. Avadhani Andhra University	16/2/2012
73		Mr. Venkat Raju, CEO BOB TECHNOLGIES, Bangalore	27/4/2012
74		Avadhani Prof. of CSE, AU, Waltair	17/2/2012
75		Dr. A. Louise Perkins (Professor University of Southern Mississippi, USA) & Dr. SumanthYenduri (Assoc. Professor, University of Southern Mississippi, USA)	6/2/2012
76		Dr. S. Srinivas Kumar, Prof of ECE and Director (R&D) JNTU Kakinada	12/9/2012
77		Lecturer Sri Gopi Kumar Bolusu, CEO Sankhya Technologies, Visakhapatnam	15/9/2012
78		Mr. Y. Ramu and Mr. P. Vinod Reddy of Tata Consultancy Services (TCS)	16/8/2013
79	MBA	Mr.T.S.Chakravarthi –University of Toronto Canada	06 <sup>th</sup> Jan,2014
80		Sri.P.BalaSubramanyam- FAPCCI,HYD	25 <sup>th</sup> Mar,2014
81		Mr.C.RamaGopal-Prof National Law University, Bhopal	17 <sup>th</sup> Mar,2014
82		Prof.P.S.S.Sita Rama Raju-HOD IT	08 <sup>th</sup> Feb,2013
83		Mr. Ravi SankarSaripalle-Former Excutive WIPRO	12 <sup>th</sup> Mar,2013
84		Mr. Y. Sankar-HSBC VSP	21th Oct,2013
85		Mr. C.RamaGopal-Charter Accounting IIM Indore	28 <sup>th</sup> Oct,2013
86		Mr.S.Sudhir Kumar-HRM Development- VSP	11 <sup>th</sup> Dec,2013
87		Mr.K.Sridhar-Talent Sprint,HYd	13 <sup>th</sup> Dec,2013

88	Mr.K.P.Krishna-BNP Chennai	15 <sup>th</sup> Dec,2013
89	Mr.C.S.Raju-Vice President-HR Maruti Suzuki New Delhi	28 <sup>th</sup> Dec,2013
90	Prof.D. Krishna sundhr IIM Banglore	10 <sup>th</sup> Jan,2012
91	Mr. S.SureshBabu AGILE Informatics singapur	24 <sup>th</sup> Feb,2012
92	Dr.srinivasSavaram Head IT consulting -VSP	24 <sup>th</sup> Apri,2012
93	Sri.K.S. Rao corporate focus, VSP	13 <sup>th</sup> july,2012
94	Sri.SyedMd Noor Shakir –Dir Empower Training solutions ,HYD	19 <sup>th</sup> july,2012
95	Smt.UmaVedula- AGM, IDBI BANK	12 <sup>th</sup> Oct,2012
96	Mr. V.Mohan Sunil-Home secretary of India CBI New Delhi	09 <sup>th</sup> Nov,2012
97	Dr.M.Lakshmipathi Raju – DCMS AU	Mar,2011
98	Dr.K. Rama Mohan Rao-DCMS AU	Mar,2011
99	Dr.R.MadhusudhanRao-DCMS AU	March,2011
100	Dr.M.Lakshmipathi Raju – DCMS AU	April,2011
101	Dr.K. Rama Mohan Rao-DCMS AU	April,2011
102	Dr.R.MadhusudhanRao-DCMS AU	April,2011
103	Dr.G.S.Shiva Kumar CEO Maple soft	April,2011
104	Dr.B.V.N.Raju Vice President, HR Synergies Castings	Sept,2011
105	Dr.M.Lakshmipathi Raju –DCMS AU	Feb,2010
106	Dr.K. Rama Mohan Rao-DCMS AU	Feb,2010
107	Dr.R.MadhusudhanRao-DCMS AU	Feb,2010
108	Dr.M.Lakshmipathi Raju – DCMS AU	April,2010
109	Dr.K. Rama Mohan Rao-DCMS AU	April,2010
110	Dr.R.MadhusudhanRao-DCMS AU	April,2010
111	Mr.Shiva Kumar CEO Maple Soft	October,2009
112	Mr.B.V.N.Raju Vice President,HR Synergies Casting	October,2009

**3.7.5 How many of the linkages/collaborations have actually resulted in formal MoUs and agreements? List out the activities and beneficiaries and cite examples (if any) of the established linkages that enhanced and/or facilitated –**

**a) Curriculum development/enrichment**

The departments invite experts to give suggestions on improving academic delivery and enhancing the system capability. There are constituted Advisory Committees for each departments where eminent professors of the field as well as leading industrialists are empanelled. The meet with the faculty of the department and suggest steps to improve delivery as well as bridge the gap between industry and institute

**b) Internship/ On-the-job training**



- Collaboration with various industries provides an opportunity to the students for industry exposure, acquiring training skills for placements and getting projects from industries.
- Students regularly take up internships with industries such as Vizag Steel Plant etc.

**c) Summer placement**

- Collaboration with various industries / organizations help the students to undergo short-term training and internship programmes during summer vacation period and semester break period.
- The college deputed M.Tech students to industries for taking up live projects and work at industry for short duration period

**d) Faculty exchange and professional development**

- Institute arranges workshops, seminars and conferences at department and inter-department levels to exchange the ongoing research activity in the fields of national importance and industry needs.
- College also arranges frequently faculty development programmes inviting resource persons from NITTTR, Chennai and other reputed Academic from IITs and NITs.

**e) Research**

Institute encourages the faculty to take up research projects offered by AICTE, DST, UGC and other State and Central Government organizations.

**f) Consultancy**

The college encourages the faculty to take up consultancy works and to extend services catering the needs of the society and industry / companies.

**g) Publication**

The institute encourages the faculty to publish their research outcome results in journals and conferences.

**h) Student Placement**

- Providing job market information and related inputs to students
- Pre-placement training from third year onwards by external agencies
- Personality Development Programmes and frequent Assessment Tests in Aptitude, Reasoning and Verbal.
- The Placement details during last 4 years

Year	2013 -14	2012 -13	2011-12	2010-11
No. of Students Placed	280 (till date)	220	238	245

**i) Twinning programmes**

NIL

**j) Introduction of new courses**

Keeping in view the needs of the society and industry/company the following new Courses /increase in intake are introduced during last 4years.

Year	New Courses introduced	Intake
2010	M.Tech.(CNIS)	18
2010	M.Tech.(VLSI)	18
2012	M.Tech.(Structural Engg)	18
2014	M.Tech.(Power Systems)	18

#### **Student exchange**

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

j) Any other

#### **3.7.6 Detail on the systemic efforts of the institution in planning, establishing and implementing the initiatives of the linkages/collaborations.**

- The institute has a Research and Development Cell that functions as explained earlier
- The college provides budget for in-house R & D every year.
- Institution provides seed money to undertake industry oriented student projects and in-house R&D projects by faculty.
- Workload will be reduced to senior faculty who involve in major R&D projects and consultancy.
- Faculty will be sponsored regularly to attend important workshops and seminars arranged by leading research organizations.
- Faculty of the departments get research projects, MODROBS, FDP and Seminar grants regularly enhancing the research culture in campus.
- Faculty members publish papers in reputed journals and the college sponsors them to present papers at Conferences / Symposiums at National and International level
- Motivational incentives in the form of cash awards are provided to the

faculty who publish papers in reputed journals.

- Departments entered into MOUs with reputed companies and take up collaborative projects from industries and take up faculty exchange programmes.
- Faculty members are encouraged to offer consultancy services
- College provides free transport to faculty for making field visits and industrial visits to meet the consultancy demands.

Any other relevant information regarding Research, Consultancy and Extension which the college would like to include.

**CRITERION – IV****INFRASTRUCTURE AND LEARNING RESOURCES****4.1 Physical Facilities****4.1.1 What is the policy of the Institution for creation and enhancement of infrastructure that facilitate effective teaching and learning?**

- The College has established policies and procedures to create and continuously enhance the infrastructure in the form of human resources (Faculty, Technical and Administrative staff), laboratory equipment, built-up place, learning resources, (print and electronic and teaching learning aids) by keeping the following objectives in view to promote Teaching Learning process directly and indirectly.
- To provide sufficient, good, airy academic and supporting spaces for effective teaching and learning.
- To have conference halls, meeting rooms, faculty cabins, digital library for providing an enabling environment for increased engagement.
- To use ICT for academic processes including Teaching & Learning
- To provide access to INTERNET to students and faculty members.
- To develop class rooms, tutorial halls, departmental and central library and contents to meet the changing requirements of teaching learning.
- To develop labs as per curriculum requirement and also beyond the curriculum.
- To promote learning materials like Charts, Write Ups, Multimedia, Models, Virtual labs for enhancing the teaching learning
- To provide amenities like canteen, transport, playgrounds etc.

**4.1.2 Detail the facilities available for**

**a) Curricular and Co-curricular Activities – classrooms, technology enabled learning spaces, seminar halls, tutorial spaces, laboratories, botanical garden, Animal house, specialized facilities and equipment for teaching, learning and research etc.**

**Classrooms:**

- The institution has sufficient number of well-furnished, well ventilated, spacious classrooms for conducting theory classes.
- Class Rooms are spacious (20% more than the required norms) and ergonomically designed so that proper ventilation, lighting is provided with good acoustics.
- Better Aspect ratio is maintained for proper visibility of glass board and audibility. All the class rooms of individual departments are at close proximity in order to have better access for the students.

**Technology enabled learning rooms:**

- Each department in the college is provided with technology enabled classroom to facilitate active and better learning.
- Each room has a seating capacity of 72 and majority of them are provided with LCD projector and LAN enabled internet connectivity etc.
- The Classrooms are also ideal for small seminars and workshops

where the audio-visual facilities available.

**Seminar Halls:**

- Each department in the college has separate seminar hall to conduct conferences, workshops and symposia for students and faculty.
- Each seminar hall has a seating capacity of 200 and is fully air conditioned. It is equipped with LCD projector, LCD screen, white board and public addressing system.

**Tutorial classrooms:**

- Each department has tutorial rooms to conduct tutorial classes to address the individual level doubts and queries of the students.
- Tutorial class is equipped with glass board, wooden benches, fans, windows for air circulation and ventilation and tube lights for proper lighting

**Laboratories:**

- All the laboratories are provided with the state of art equipment
- All laboratories are well equipped, and well maintained not only for carrying out curriculum-oriented lab practical but also to carry out research activities.

**Specialized facilities and equipment for teaching, learning and research:**

- English communication skills labs are equipped with licensed software's like CLARITY INFINITY and RENET.
- Apart from the central library, each department is having separate department library with good collection.
- The college has provided web-based materials and 750 hours of NPTEL video lectures by IIT teachers on 250 subjects.
- The College Library has about 51,000 volumes of books and has also a Digital Library with 354 journals as hard copies and thousands of on-line journals through IEEE, SPRINGERS, ASCE, J-GATE, SCIENCE DIRECT, ASTM, EBESCO etc... And the college has 16 Mbps leased line internet facility to facilitate in easy access of the above on-line journals
- For self-learning, reference books for all the subjects are available in the central library.
- The Central Library has exclusive Lab with internet facility and 36 systems in the first floor, administrative building providing for the students use. All the self-learning resource materials are made available in digital library for students to go through on different topics of their choice.

**b) Extra-curricular activities: sports, outdoor and indoor games, gymnasium, auditorium, NSS, NCC, cultural activities, Public speaking, communication skills development, yoga, health and hygiene etc.**

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

- MVGR College of Engineering strikes a balance between the axioms "Knowledge is Power" and "Health is Wealth".
- The college promotes sports and games to develop team spirit, leadership qualities and organizing abilities among the students.
- Apart from having good infrastructure for Games & Sports, the college has two full-time Physical Directors who are responsible

to oversee sports facilities and organize Games & Sports activities.

- Major facilities include:
  - A well maintained cricket ground which hosts inter-departmental and other matches throughout the year.
  - A permanent basketball court with reinforced concrete floor.
  - A well-equipped gymnasium.
    - Andhra Cricket Association(ACA) in association with the college is building cricketing and other sports infrastructure in a 10 acre land abutting the campus at an estimated cost of Rs. 4 crore
    - The college organizes intra and inter-departmental sports activities and teams from the college actively participate in tournaments conducted outside of all departments participate and prove their talents

Facilities	Number available for	
	Boys	Girls
Volleyball court	1	1
Basketball	1	
Throw Ball Court	1	
Tenni coit Court	1	1
Shuttle Badminton Court	2	2
Kabbadi Court	1	
Chess Boards	6	6
Carom Boards	3	3
Table Tennis Boards	1	1

#### **Auditorium:**

- The college has an open air auditorium with a seating capacity of 3000
- The college also has two indoor auditoriums with capacity 250 each to cater the needs of students

#### **NSS:**

- The NSS unit was established in this Institution in the year 2000 with a goal of “Education through community service and community service through education. The ministry of youth affairs and sports through JNT University, Kakinada allotting the grants to conduct regular as well as special campaign activities. The NSS core committee constitutes Principal as the chairman, Program officer as the coordinator and faculty as members. The Management of this College has given their concern to start this Unit, in the campus, in order to develop the student’s personality through Community service
- The specific objectives of this unit are
  - To kindle the student’s social consciousness.
  - To give them opportunities to work with and among people and to develop awareness and knowledge of realities.
  - To gain skills in the exercise of democratic leadership.
  - To put their scholarship to practical use in mitigating at least some social problems and in promoting welfare.
  - To enrich personality.

**Cultural Activities:**

- Cultural committee of the college encourages and lends a helping hand to develop the innate talents of students in cultural activities with the help of departmental associations, Literary Club, English Club etc.
- As part of this, the college encourages participation of its students by sponsoring them to various literary and cultural meets.
- Departmental Associations conduct events aimed at overall development of the students.
- Institution has provided literary and cultural rooms with needed audio visual equipment to conduct various activities for students.

**Communication Skills Development:**

- English communication skills labs are equipped with Licensed software's like CLARITY INFINITY and RENET
- The focus is on training the students to speak fluent, intelligible, appropriate, and functionally correct English through coaching in phonetics, role plays, describing exercises and debates.
- Advanced communication skills laboratory focuses on reading and writing skills and integrating these with speaking, listening and other intra and interpersonal skills.
- Keeping in view of the growing importance of Soft Skills, the training and placement department is imparting Soft Skills to the student's

**Yoga, health and hygiene:**

- The college has a qualified medical officer Dr. G. V. Ramana Murthy Raju, MBBS (Regd.No.5957) and auxiliary nurse midwife Mrs.V. KrishnaVeni, who are working in the institute since its inception. i.e., since the last 16 years, to provide general medical assistance.
- Also the institute has a First Aid Medical Examination Room with other necessary medical equipment and facilities.
- The medical room is provided with two beds, stretcher and wheel-chair. First-aid kits are available with all laboratories, library, workshop, hostels etc.
- Periodic medical checkup is carried out to both faculty and students
- Students are given free vaccinations against Typhoid and Hepatitis in the first year course of their study.
- Ambulance service is provided
- College buildings are being maintained ensuring maximum levels of safety and hygiene.
- Yoga classes are organized in the college hostels on regular basis.

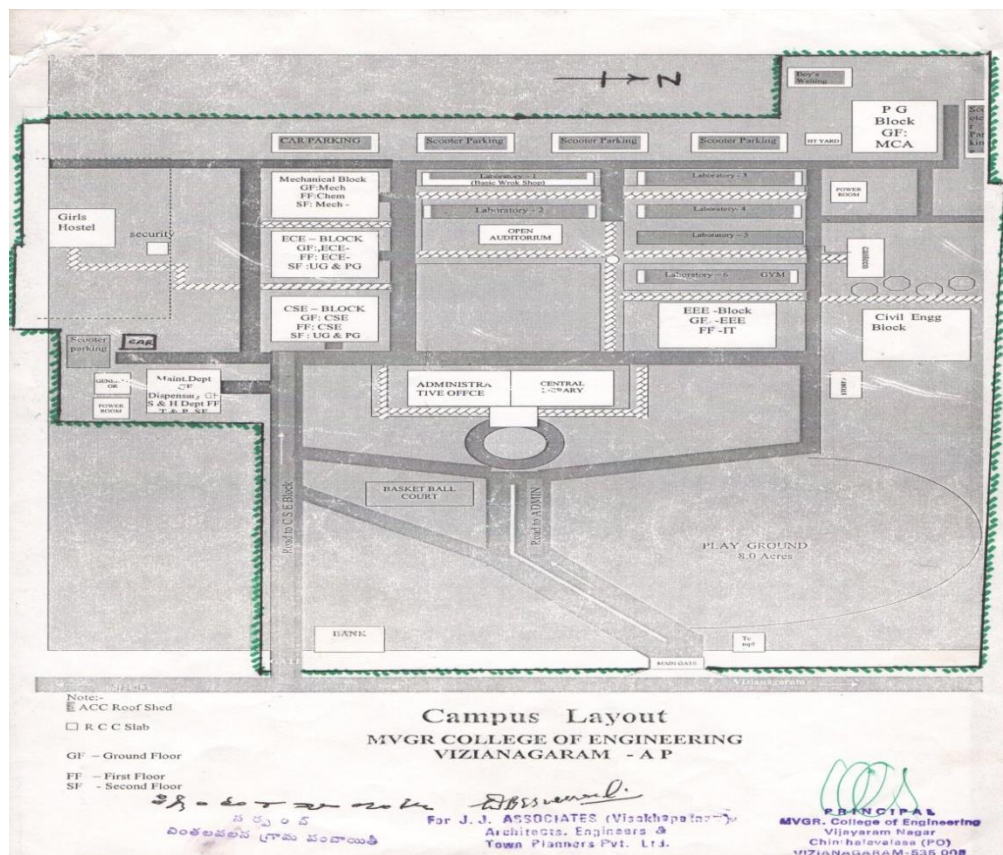
**4.1.3 How does the institution plan and ensure that the available infrastructure is in line with its academic growth and is optimally utilized? Give specific examples of the facilities developed/augmented and the amount spent during the last four years (Enclose the Master Plan of the Institution/ campus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



The College is located in lush green, serene and pollution free environment spread over 42.30 acres of land in *Chintalavalasa* village situated in the outskirts of *Vizianagaram*. Another 17 acres abutting the campus earmarked for future expansion out of which the institution is using 10 acres for building a sports academy in collaboration with Andhra Cricket Association. Another 42 acres about 15 KMs from the campus is catering to the requirements of institutional R & D activities in the area of alternate fuels. The total built up area as of now is about 32,833 sqms that provides spacious and well ventilated academic and administrative facilities

- The college is demarcated completely by compound wall.
- All the roads in the campus are blacktopped and all facilities within the college are well connected.
- The main entrance gate on the outer compound wall is the only point of entry into the college and is well guarded.
- Dedicated department wise buildings.

### CAMPUS LAY-OUT OF MVGR COLLEGE OF ENGINEERING



### Process of Budget Allocations

Yearly proposals are prepared by Heads of various departments with the help of Financial Officer of the college and are forwarded to the Principal. Management Sub-committee vets the proposals for their compliance to



regulating bodies guidelines as well as developmental requirements of the institute in line with the mission & vision principal places the proposals to the Governing Body for approval. Funds would be spent from the approved budget. Recurring expenditure like establishment (salaries etc.), power, telephones, transport, maintenance and such other mandated payments due to affiliating and regulating bodies are adequately being met from internal accruals. Expenditure over and above the receipt, which largely constitute developmental budget in terms of equipment and civil infrastructure, the management makes suitable arrangements either through society funds or loans from financial institutions

**Amounts spent during the last Four years:**

Items	Expenses in 2013 - 14	Expenses in 2012 - 13	Expenses in 2011 - 12	Expenses in 2010 - 11
Acquisition of land; & new buildings and infrastructural built-up	18561476	32022161	31515480	9973842
Library Books & Equipment	298209	609508	611385	803124
Library E-Journal, Print Journals & Magazines	2984767	2757500	2713845	1417406
Laboratory Equipment & Software	8978461	9098694	3089198	11389923
Games and Sports	21279	408645	186971	92993
Buses & Cars purchase	1270140	1157769	-	-
Furniture	1529534	2411190	1557709	923920
Administrative and other Expenditure	27861066	34984515	29609614	25554477
Generator purchase				

**Infrastructure details of the Institute:**

S. No	Building Details			Area(in sqms)	
				Plinth	Carpet
	BLOCK	Slab Type	Floor		
1	Mechanical Block	RCC Slab	Ground Floor	1510	1419
			First Floor	1510	1419
			Second Floor	1510	1505
			Third Floor	66	64
2	CSE Block	RCC Slab	Ground Floor	1510	1419
			First Floor	1510	1420
			Second Floor	1510	1505
3	ECE Block	RCC Slab	Ground Floor	1485	1368
			First Floor	1485	1368
			Second Floor	1485	1479

4	EEE Block	RCC Slab	Ground Floor	1479	1395
			First Floor	1479	1395
			Second Floor	1479	1395
5	Civil Block	RCC Slab	Ground Floor	1952	1424
6	PG Block	RCC Slab	Ground Floor	1564	1168
			First Floor	1519	1168
7	Administration Block	RCC Slab	Ground Floor	863	842
			First Floor	863	842
			Second Floor	46	45
8	Library Block	RCC Slab	Ground Floor	279	232
			First Floor	279	232
9	S & H Block	RCC Slab	Ground Floor	168	165
			First Floor	168	165
			Second Floor	168	165
10	Bank	RCC Slab	Ground Floor	130	116
11	Sri Ganesh Temple	RCC Slab	Ground Floor	65	63
12	Generator Room	RCC Slab	Ground Floor	63	60
13	Girls Hostel	RCC Slab			
A	A-Block:	RCC Slab	Ground Floor	975	521
		RCC Slab	First Floor	700	521
		RCC Slab	Second Floor	700	521
B	B-Block:	RCC Slab	Ground Floor	975	521
		RCC Slab	First Floor	700	521
		RCC Slab	Second Floor	700	521
C	Office:	RCC Slab	Ground Floor	210	161
		RCC Slab	First Floor	210	161
D	Dinning:	RCC Slab	Ground Floor	550	515
14	Main Gate:	RCC Slab	Ground Floor	195	150
15	Amenities	RCC Slab	Ground Floor	204	147
16	Food Court	RCC Slab	Ground Floor	117	112
17	Work Shops				

	Work Shop-1	ACC Sheet Roofing	Ground Floor	483	478
	Work Shop-2		Ground Floor	483	478
	Work Shop-3		Ground Floor	483	478
	Work Shop-4		Ground Floor	483	478
	Work Shop-5		Ground Floor	483	478
	Work Shop-6		Ground Floor	483	478
	Work Shop-7		Ground Floor	94	70
18	Servant Quarters	ACC Sheet Roofing			
	TWIN-1		Ground Floor	75	46
	TWIN-2		Ground Floor	75	46
19	Car/Scooter Parking Shed				
	At west boundary	ACC Sheet Roofing	Ground Floor	353	353
	South & West sides at Boundary	G.I. Sheet Roofing	Ground Floor	437	437
	At North of Civil Block	G.I. Sheet Roofing	Ground Floor	181	181
20	Canteen	RCC Slab	Ground Floor	578	474
			First Floor	17	16
21	Fresh Choice	GI Sheet Roofing	Ground Floor	37	37
22	Bank ATM	RCC Slab	Ground Floor	32	32
Total Built-up Area					32833

**Future Planned Expansions:**

- New academic block with built up area 4000 sqms. is under construction on the first & second floors of CIVIL Block .
- It is also proposed to construct a workshop building of 500 sqms built up area

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

- Maintenance committee headed by Dean (Civil Infrastructure) looks after everything connected to construction & maintenance of buildings. College has a Campus Engineer to implement the decisions taken by maintenance committee in connection with maintenance of infrastructure, electrical and plumbing requirements, painting and repairs if any in the campus. In addition, campus engineer attends to the complaints and suggestions from students and faculty
- The college has taken care of physically disabled students. In this regard, lifts have been provided in the main block and in the academic

block. Ramps are provided for easy movement of wheel chairs

**4.1.5 Give details on the residential facility and various provisions available within them: Hostel Facility – Accommodation available, Recreational facilities, gymnasium, yoga center, etc., Computer facility including access to internet in hostel, Facilities for medical emergencies, Library facility in the hostels, Internet and Wi-Fi facility, Recreational facility-common room with audio-visual equipment, Available residential facility for the staff and occupancy Constant supply of safe drinking water, Security**

**Hostel Facility:**

Student hostels are equipped with all amenities and facilities. Hostel is available for both boys and girls with a capacity of 120 and 240 respectively. Hostel for girls is situated in the campus. Boys hostel is abetting the campus.

Hostels	No. of rooms	No. of students accommodated	Whether INTERNET & Wi-Fi facility provided
Hostel for Boys:	40	120	Yes
Hostel for Girls:	120	240	Yes

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

- Amenities' building is constructed and the facilities like Canteen, Games room, Gymnasium and Recreation-cum-Reading halls for both girls and boys separately are in place.
- Guest rooms for Gents and Ladies separately are also provided in the 1<sup>st</sup> floor of the Amenities Building.

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

Computing facilities are provided to meet the practical requirements

**Facilities for medical emergencies:**

- The College also has entered into a tie-up with MIMS (Maharaj Institute of Medical Sciences, Nellimarla), a reputed medical teaching hospital. The MIMS Hospital has all facilities to handle emergency and acute cases. The Hospital is situated within 12 kms from the institute.
- The college has an MoU with Tirumala Nursing Home Vizianagaram and MIMS for Ambulance service. Andhra Pradesh Government provides an emergency ambulance service through 108. For day time minor casualties/sickness, college has separate van

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

- The college has a qualified medical officer Dr. G. V. Ramana Murthy Raju, MBBS (Regd.No.5957) and auxiliary nurse midwife Mrs.V. KrishnaVeni, who are working in the institute since its inception. i.e., since the last 16 years, to provide general medical assistance. Also the institute has a First Aid Medical Examination Room with other necessary medical equipment and facilities.
- The medical room is provided with two beds, stretcher and wheel-chair. First-aid kits are available with all laboratories, library,

workshop, hostels etc.

- Periodic medical checkup is carried out to both faculty and students
- Medical group insurance is provided for all staff on rolls

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

**Grievance Redressal unit:**

From its inception the Grievance Cell is in existence. It is involved in looking into specific grievances of the students and staff and has been successfully addressing the grievances, if any, from time to time.

**Counseling and Career Guidance:**

Career Guidance Cell is constituted with the following members:

1. Principal
2. Dean, Training & Placement
3. TPO
4. One faculty from each of the departments

The cell provides effective career guidance by organizing guest lectures by experts from Academics and Industry for the students of third and final year. The cell has tie-ups with various professional organizations which help in the guidance and development of the students.

The cell also provides guidance to the students for their career development and helps them in preparing for various competitive examinations.

Functions of the Committee:

- To arrange Seminars/ Workshops on Career opportunities
- To arrange GATE/TOEFL/IELTS/GMAT/CAT coaching classes
- To conduct mock tests for competitive examinations
- To arrange interactive sessions between alumni and students
- To design and develop study material and make it available in the Library / Intranet

**Placement Unit:**

The institute has a separate Training and Placement Cell which looks after career and personality development students. This cell is constituted with the following members:

S.No.	Name of the Members	Designation	Dept.	Position
1	Dr. M. Sunil Prakash	Professor	ECE	Dean (T&P)
2	Mr. K. Praveen	Assoc. Professor	MECH	TPO
3	G.V.S.K.Reddy	Asst.Professor	Chem	Member
4	M. Krishna Murthi	Asst.Professor	ECE	Member
5	P.SaiSrinivas	Asst.Professor	EEE	Member
6	P.SrinivasaRao	Assoc.Professor	IT	Member
7	K. Pavan Kumar	Asst.Professor	Mech.	Member
8	G.Suvarna Kumar	Sr.Asst.Professor	CSE	Member
9	MVM Kalyani	Asst. Professor	MCA	Member
10	T NarayanaRao	Asst. Professor	MBA	Member

11	A. Vara Prasad	Asst. Professor	Civil	Member
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#### Infrastructure in Training & Placement Cell

- Exam Halls (to conduct on line / off line tests)
- Control Room (for recruiters)(A/C)
- G.D. and interview rooms (2 A/C Chambers)
- Fully equipped training room
- Computer center ( with LAN, 20 KVA UPS backup and 8 Mbps Internet connectivity)
- Training & Learning resources available through intranet

#### Health Centre:

- The college has a qualified medical officer Dr. G. V. Ramana Murthy Raju, MBBS (Regd.No.5957) and auxiliary nurse midwife Mrs.V. KrishnaVeni, who are working in the institute since its inception. i.e., since the last 16 years, to provide general medical assistance. Also the institute has a First Aid Medical Examination Room with other necessary medical equipment and facilities.
- The medical room is provided with two beds, stretcher and wheel-chair. First-aid kits are available with all laboratories, library, workshop, hostels etc.

#### Canteen:

Hygienically maintained canteen facility with 595sq.m is available in the campus with a seating capacity of 250 and daily usage is 1500.

#### Recreational spaces for staff and students:

Amenities' building is constructed and the facilities like Canteen, Games room, Gymnasium and Recreation-cum-Reading halls for both girls and boys separately are in place.

#### Safe drinking water facility:

The College has 12 bore wells to serve the drinking water requirement in the campus. Storage capacity of drinking, washing and watering facilities is about 1,60,000 liters. Aqua guards & other water purifiers are attached to as many as 21 water coolers for fresh and purified water supply to students and staff

#### Auditorium:

- The college has an open air auditorium with a seating capacity of 3000
- The college also has two indoor auditoriums with capacity 250 each to cater the needs of students

## 4.2 Library as a Learning Resource

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

- The library has an Advisory Committee.
- The committee is intended to plan and coordinate the execution of the requisite procedures for the functioning of the library.
- It takes up the process of identifying, planning, and procurement of the books, journals, manuals etc.
- It ensures the up gradation of the library to keep pace with the

technological developments.

**Composition of the Advisory Committee:**

The library advisory committee comprises of

1. Principal – Chairman
2. Vice-Principal (Academics)- Member
3. Asst.-Principal (Academics) -Member
4. Nominees from the Departments-Member
5. Librarian-Member Convener

**Significant Initiatives of the Committee:**

- The committee monitors the allocation of funds for the books, journals, manuals etc. and the digital processing of information, including on-line journals.
- It also expected to monitor the student and staff utilization of the library.
- The committee shall take into consideration all the procurement criteria, and rules and regulations of the library management, including cataloguing and access- administration.
- The committee shall look into the indents of the departments and the purchase mechanism with multiple volumes wherever necessary.
- The committee is expected to submit the minutes of its meetings along with observations, suggestions, if any and resolutions to the college management committee for further processing.

**4.2.2 Provide details of the following:**

- Total area of the library (in Sq. Mts.) : 1658.7 Sq.Mts
- Total seating capacity : 600
- Working hours (on working days, on holidays, before examination days, during examination days, during vacation) :
 

On working days	: 8.00 AM to 6.00 PM
On Holidays	: 8.00 AM to 2.00 PM
On Examination days	: 7.00 AM to 8.00 PM
During Vacation	: 8.00 AM to 5.00 PM
- Layout of the library (individual reading carrels, lounge area for browsing and relaxed reading, IT zone for accessing e-resources)

**Ground Floor:** Text book section, Circulation section, e-Learning centre, discussion rooms, Server Room, Book bank for SC/ST, Back Volumes, Project Reports and Media Resource Centre

**First Floor:** Reference section, Journals section and Video Projection and Video Conferencing Room, Reading Rooms, News Papers and Periodicals

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

The Library advisory committee reviews the requirement received from various departments and recommends the same to the college

management committee for further processing. The Institute gets the all reading material well in advance of the commencement of academic year.

**Details of the amount spent during the last four years:**

Library holdings	2013-2014		2012-2013		2011-2012		2010-2011	
	Number	Total Cost	Number	Total Cost	Number	Total Cost	Number	Total Cost
Text books and Reference books	1277	909456.00	2020	989481.00	2170	1360792.00	1436	738474.00
Journals/ Periodicals	182	217514.00	147	285236.00	124	288000.00	106	310695.00
e-resources	4099	1895709.00	2036	1605742.00	3	600000.00	2	459195.00

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

**OPAC**

An OPAC (Online Public Access Catalogue) has been created and about 40 terminals are provided to facilitate its access. It is also made available via LAN in the campus.

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

Subscribes to AICTE Mandatory E-Journals like IEEE, SPRINGER (EE, EC&CS), ASME, ASCE, ELSEVIER, J-GATE Engg, J-GATE Management, McGraw-Hill and ASTM Digital Library

**Federated searching tools to search articles in multiple databases**

A web based search engine is available to search articles in multiple databases and it is an emerging feature of automated, Web-based library and information retrieval systems.

**Library Website**

Library information is available on Institute website.

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

Both Faculty and students can access to e-Publications like E-journals, E-books and NPTEL

**Library Automation**

All the data relating to the Library is computerized and bar coding has been introduced.

**Total number of computers for public access**

40 computers are available for public access in library



**Total number of printers for public access**

Two printers are available for public access in library

**Internet band width/speed**

Internet band width in the library is 10mbps

**Institutional Repository: Yes****Content management system for e-Learning**

E-Journals like IEEE, SPRINGER (EE, EC&CS), ASME, ASCE, ELSEVIER, J-GATE Engg, J-GATE Management, McGraw-Hill and ASTM Digital Library and NPTEL Web Courses, Video Courses NPTEL, MIT, Stanford, Harvard and Learning ware Materials for Engineering Programme.

**Participation in Resource sharing networks/consortia (like Inflib net)**

DELNET

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

Average number of walk-ins	: 600
Average number of books issued/returned	: 450
Ratio of library books to students enrolled	: 1:15
Average number of books added during last three years	: 3380
Average number of login to OPAC	: 120
Average number of login to e-resources	: 150
Average number of e-resources downloaded/printed	: 100
Number of information literacy trainings organized	: 2
Details of “weeding out” of books and other materials	: 125

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

Manuscripts	: No
Reference	: Yes
Reprography	: Yes
ILL (Inter Library Loan Service)	: Through
DELNET	

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

Download : Yes  
(E- Journals, E- books etc.)

Printing	: Yes
Reading list/ Bibliography compilation	: Yes
In-house/remote access to e-resources	: Yes
User Orientation and awareness	: orientation and awareness
seminars are organized for library staff, students and faculty members	
Assistance in searching Databases	: Yes
INFLIBNET/IUC facilities	: DELNET

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

- The Library staffs always extend their services to the student and teachers of the college to look after in various aspects mentioned below.
- Library staff issue books, journals, new arrivals to the students and faculty

- Library is open beyond institute hours for students
- Library has well-furnished students study center with a capacity of 600
- Call facility for demand on book is available in library
- Book bank facility is available to the students
- Library staff displays the important media notifications
- Library organizes book exhibition for student & staff
- Duplication/Reprographic facility is available in library
- Downloading and preserving the hard copy of study material
- Issue of books to departmental library
- Special rights are given to faculty/students to access the e-Journals, Periodicals & Reference books
- Inter library loan facility provided to the students and staff
- To facilitate the STOP/START mode of e-learning, discussion rooms are established.
- A Video Projection Room is provided with projection facility and video conferencing.

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

- Library staff helps visually/physically challenged persons for the book issue as well they provide the library facility on need basis as & when required
- Special rights are given to them to access the e-Journals
- Special book bank service is offered to the physically challenged persons.

**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. (What strategies are deployed by the Library to collect feedback from users? How is the feedback analyzed and used for further improvement of the library services?)**

- Yes, library collects the feedback from its users
- The feedback is collected from students regularly in a special designed format
- A feedback box is kept in the library to get feedback from staff and students at any point of time.
- Exit feedback is collected from the students regarding the library facility available in the campus.
- The feedback information analyzed by the library advisory committee is utilized for further improvement of the library.

**4.3 IT Infrastructure**

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

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

S. No	Configuration	No. of systems
1.	Core i3 system Intel ® Core(TM) (2120@3.30 GHz, 3300 MHz), 4/8 GB -DR3/1333 MHz, 500 GB HDD	199
2.	Intel Core 2 Duo, Q35/E6550 Processor/ 2GB DDR/ 160 GB HDD/17" TFT	195
3.	Intel Dual Core Processor: Intel 2.8 GHz, D915, 1GB RAM, HDD: 80 GB/ 17" TFT	433
4.	P-IV 2.4 GHz Processor / 512 MB RAM/ 40 GB HDD/17" Color Monitor	235
5.	HP Proliant ML 110G7 Server Intel e3 – 1220/16GB Ram/500GB HDD. -1 N Computing L300 Clients	11
6.	Servers: IBM e-server, X225 Xeon, HP XW 4200 Work Station, ML 350 G3& G4, IBM AIX, Dell AS-PE TM 2900 & 1900 Power Edge, Dell T620, Dell T1500 , T1 10	14
	Total	<b>1037</b>

## 2. Computer-student ratio

UG - 1: 4 PG - 1: 2

## 3. Standalone facility:

33 Laptops are provided to the staff for standalone facility

## 4. LAN facility

Entire campus is connected with Optical Fiber Backbone and all the systems are connected in campus LAN.

## 5. Wi-Fi facility:

Wi-Fi Hotspot facility is available in 7 Blocks in the campus.

## 6. Power Backup Module:

We have a two-step power backup facility.

Step 1: Hot backup provided by UPS's with on an average 30 minute backup time.

Step 2: We have a generator capability of 377.5 KVA (140KVA, 125 KVA, 82.5KVA, 30KVA) to power the infrastructure of the college 24\*7.

## 7. Licensed software

Department	Licensed Software
CIVIL	STAAD PRO, AGIS Arc view with 1 SA*
EEE	MATLAB R2006a(15 users) Perpetual
MECH	Pro-E Wild fare 5.0+WinChill (50 users), ZN Tutor-cfd-10 Licenses & CFD expert + 12 Licenses (Network Version), TWINCAT, CREO-2 Up gradation Pro-E5, Auto Desk Inventor Series (Inventor 5.0, Auto CAD 2002 & Mechanical Desktop 6.0), CATIA V5R9 with CAM Module Software, I-Deas Nx CAD Modular Software ( 5 Units), ALG Nastran & EDGE CAM (11.0) 5 users , 99 users

ECE	<p>Xilinx 25Users Perpetual, Mentor Graphics HEP1 ( 4 Tools)</p> <ol style="list-style-type: none"> <li>1. Model Sim. 6.4</li> <li>2. Precision Synthesis</li> <li>3. Leonardo Spectrum</li> <li>4. HDL Designer Series - 20 Users</li> </ol> <p>Mentor Graphics HEP2 (4 Tools) IC Station, Design Architect, Calibre Analog/Mixed Signal Simulator - 20Users Model sim FPGA advantage 5.2 Up to ( 30<sup>th</sup> April 2012), MAT Lab with Symlink , Sym Power Systems, Control Systems(10 Users) for both windows and Linux Signal Processing Toolbox (15 users), Communication Toolbox (15 users), Filter Design Toolbox</p>
CSE/IT/ MCA	<p><b>MSDN Academic ALNG</b></p> <ul style="list-style-type: none"> <li>• MSLrning IT Academy ALNG Subs VL MVL Srvcs(1)</li> <li>• SQLCAL ALNG LicSAPk MVL Dvc CAL (100)</li> <li>• FrFrntCLtSec ALNG Subs VL MVL PerUsr(100)</li> <li>• WinSvrStd ALNG LicSAPK MVL(2)</li> <li>• SQLSvr ALNG LicSAPk MVL(2)</li> <li>• DsktpCampus Alng LicSAPk MVL (100)</li> </ul> <p>Kaspersky Endpoints Security for Business License – 3 Years , Qualnet, Flash Pro CS511 windows International AUO License - ( 30 Users ), OS Novell Netware 5.0, Turbo C++, Turbo Pascal 7.0, OS-Windows NT 4.0, Oracle Internet developer Suite,</p> <p><b>Macromedia Suite MX 2004:</b> Macromedia Freehand, Macromedia Fireworks Macromedia Dreamweaver, Cold Fusion</p> <p><b>Macromedia Director MX 2004:</b> Visual Studio .net 2003 Academic Edition Width MSDN 2003,IBM Rational Rose</p>
CHEM	<p>Ansys Academic Teaching CFD Version 12.1 512000 Nodes (25 Users) Perpetual, Ansys Academic Research CFD Version 12.1 unlimited Nodes and (Server) Perpetual, ANSYS 10.0 Advanced Research Version, SIMULATION Software</p>

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

All the systems in the campus are connected with internet & intranet

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

- Internet service is available for both faculty and students in the campus
- 62 systems are provided with internet facility in the central computing centre
- All the departmental computing centers are provided with internet facility
- 30 systems are provided with internet facility in the central

library

- Internet service is provided to both boys and girls hostel
- The College provides internet facility to staff members at the respective departments in order to access the required study material from available e resources and present them as part of their teaching process.
- The Principal's Office, Administrative Office, Examination Section, Training and Placement Cell and Senior Faculty member cabins are provided with internet facility
- .Wi – Fi connectivity is available in and around the blocks
- Un-interrupted power supply is made available in the campus so that the students

and staff can access the internet without any interruption

**Specifications:**

- Internet Provider:** BSNL
- Band width:**  
16Mbps dedicated leased line  
10Mbps National Mission for Education through Information & Communication Technology with 20 Connections of 512Kbps Broad Band.

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

- Computer systems are upgraded with latest configuration once in Three years.
- Individual up gradation of the computers is taken up as per the need and requirements of the various departments.
- Enough provision is made available in the annual budgets for the procurement of the computer systems.
- Once new systems are procured, they replace with the existing systems as per the requirements of the departments.
- All the computer systems in the campus are regularly monitored by the system administrator and maintenance staff.
- The trouble/problems experienced by the computers in the various laboratories are entered by the lab programmers/technicians in the complaint register.
- The maintenance staff will then goes to the respective labs for identification of the problems and resolves the same at the respective places.
- In case of major problems i.e. replacement of component/part during warranty they are sent to the respective service centers and got replaced at the earliest.
- Computer center is provided with Fourteen servers of different capacities to cater the

computer requirements.

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

Amount spent for procurement, up gradation, deployment and maintenance of the Computers and their accessories in the institution during last four years:

	2013-14	2012-13	2011-12	2010-11
<b>Amount Spent</b>	40,43,725	56,07,219	11,30,762	58,43,676

**4.3.5 How does the institution facilitate extensive use of ICT resources including development and use of computer-aided teaching/ learning materials by its staff and students?**

- The Institution has adequate computing facility for its faculty. Faculty members are provided with computers with internet facility for preparation of teaching/learning materials in their respective departments.
- Each department has its own computing facility based on the curriculum demand. Number of computer laboratories and number of computers in each laboratory vary from department to department.
- The faculty and students can access e – resources available in the library through Internet & Intranet facility.
- Adequate Multimedia projectors, OHPs are available within the college for the faculty use.
- Each department in the institute has individual seminar halls provided with LCD projector, PA system and internet facility.

**4.3.6 Elaborate giving suitable examples on how the learning activities and technologies deployed (access to on-line teaching - learning resources, independent learning, ICT enabled classrooms/learning spaces etc.) by the institution place the student at the centre of teaching-learning process and render the role of a facilitator for the teacher.**

- The institution acts as a facilitator for e-learning material (NPTEL video lectures) and the accession of online lectures of various

experts from IITs, NITs and Reputed institutes.

- Institution also provided a new facility, LEARNINGWARE accession software to learn the core topics in technology.
- Online/offline course material for JNTUK curriculum provided by Centre of Excellence for e-Resource Development & Deployment (CoEeRD), JNT University, through Globarena.
- Minicourse webinars by US subject experts offered live and recordings available later through the Indo US Collaboration for Engineering Education(IUCEE)

**4.3.7 Does the Institution avail of the National Knowledge Network connectivity directly or through the affiliating university? If so, what are the services availed of?**

NO.

**4.4 Maintenance of Campus Facilities**

**4.4.1 How does the institution ensure optimal allocation and utilization of the available financial resources for maintenance and upkeep of the following facilities (substantiate your statements by providing details of budget allocated during last four years)?**

Yearly proposals are prepared by Heads of various departments with the help of Financial Officer of the college and are forwarded to the Principal. Management Sub-committee vets the proposals for their compliance to regulating bodies guidelines as well as developmental requirements of the institute in line with the mission & vision principal places the proposals to the Governing Body for approval. Funds would be spent from the approved budget. Recurring expenditure like establishment (salaries etc.), power, telephones, transport, maintenance and such other mandated payments due to affiliating and regulating bodies are adequately being met from internal accruals. Expenditure over and above the receipt, which largely constitute developmental budget in terms of equipment and civil infrastructure, the management makes suitable arrangements either through society funds or loans from financial institutions

**Amount spent for maintenance of facilities during the last four years:**

Items	Expenses in 2013-14	Expenses in 2012-13	Expenses in 2011-12	Expenses in 2010-11
Building	22,97,023	10,85,280	6,01,524	6,27,812
Furniture	-	-	-	-
Equipment	13,75,698	14,24,247	14,38,421	5,95,530
Computers	9,86,153	4,87,610	4,99,153	2,26,052
Vehicles	5,39,546	4,81,056	3,93,053	4,08,585
Any other	16,11,639	5,55,498	5,80,084	4,32,721

**4.4.2 What are the institutional mechanisms for maintenance and upkeep of the infrastructure, facilities and equipment of the college?**



- **Maintenance of Buildings:** Maintenance committee headed by Dean (Civil Infrastructure) looks after everything connected to construction & maintenance of buildings. College has a Campus Engineer to implement the decisions taken by maintenance committee in connection with maintenance of infrastructure, electrical and plumbing requirements, painting and repairs if any in the campus. In addition, campus engineer attends to the complaints and suggestions from students and faculty.
- **Maintenance of Campus:** The day-to-day cleaning of the campus is maintained by the Maintenance Supervisor who reports to the Campus Engineer. Maintenance Supervisor is provided with a team of contingent staff for housekeeping, sanitation and gardening works in the campus daily. The Maintenance Supervisor prepares a schedule for regular maintenance of the campus.
- **Maintenance of Library:** the infrastructure and facilities available in the library are looked after by the library staff as per the guidelines for library committee headed by Asst. Principal (Academics). Library stock verification is carried out annually. Up keep of the library is also looked after by the Maintenance Supervisor. The books and journals are kept clean and tidy by the library assistants who report to the Librarian.
- **Maintenance of Play Area:** - The Physical Directors are in-charge for the play areas. The cleanliness is maintained with man-power provided by the Campus Engineer.
- **Maintenance of Labs & Lab Equipment:** The Equipment in the labs is monitored by the lab technicians who closely observe their functioning & calibration regularly and report failures to the lab in-charges. The lab in-charges are responsible for the physical safety, preventive and breakdown maintenance of all lab equipment. They also suggest the purchase of new equipment (necessitated by change of Syllabus), scrapping obsolete and old equipment in the lab stock and for the replacement/ repair of the damaged. The committee ensures the availability and accessibility by keeping the lab infrastructure in working condition. Each Lab is provided with suitable Notice Boards, Display Charts for access to information and enhanced learning.
- **Maintenance of Teaching Aids:** All the departments have dedicated teaching aids which are centrally maintained by the E-Service committee headed by a senior professor with the help of system administrator and E-Service committee member representing the department. Department E-service committee member nominated by the HoD is in charge for maintenance and to monitor the teaching aids allotted to the department like department lap-tops, OHPs, LCD projectors, White Screens etc., The maintenance registers are available in the respective departments.
- **Office Infrastructure:** All the equipment and the other office infrastructure is maintained under the supervision and guidance of Maintenance Coordinators/Conveners in Electrical, Mechanical and Communication equipment. Whereas, the computers located all over the campus are maintained by system administrator and his team and regular up gradation is carried out for proper functioning. Annual



maintenance contracts are made with outside agencies for maintenance of a few equipment where maintenance is required to be done by professionals and more qualified technicians. Matters concerning the maintenance of buildings and infrastructural facilities, including cup-boards in the walls and name plates etc., the HODs or the concerned in-charge will make a requisition to the Principal which will be forwarded to the Project Officer.

**4.4.3 How and with what frequency does the institute take up calibration and other precision measures for the equipment/instruments?**

- The department takes the initiative to calibrate the precision instruments for their optimum and assured performance, once in three years
- Faculty members take master readings once in a semester to ensure proper working of the equipment.

**4.4.4 What are the major steps taken for location, upkeep and maintenance of sensitive equipment (voltage fluctuations, constant supply of water etc.)?**

- The Department takes steps to protect sensitive instruments from mechanical and electrical damage, so that they render optimum and assured performances
- All these instruments are protected from voltage fluctuations and power outages through the use of off-line and dedicated on-line UPS
- The college has 350 kW HT transformer installed in the campus by Andhra Pradesh State Electricity Board catering to the energy needs of the campus. As a backup, the institute also has standby diesel generators of 82.5 kW, 125 kW and 140 kW amounting to equal backup support i.e., 347.5 KW in the event of power failures

**Generator Power Backup: 4 Generators**

S. No.	Generator (capacity)	Backup for Academic Blocks
1	82.5 kw	IT,EEE & CIVIL Blocks
2	125 kw	Mechanical , Chemical , MBA & MCA Blocks
3	140 kw	CSE, ECE & Administrative Block covering Library & seminar hall
4	35 kw	Girls Hostel

**Supply of Water:**

The College has 12 bore wells to serve the drinking water requirement in the campus. Storage capacity of drinking, washing and watering facilities is about 1,60,000 liters. Aqua guards & other water purifiers are attached to as many as 21 water coolers for fresh and purified water supply to students and staff

**CRITERION -V****STUDENT SUPPORT AND PROGRESSION****5.1 Student Mentoring and Support****5.1.1 Does the institution publish its updated prospectus/handbook annually? If 'yes', what is the information provided to students through these documents and how does the institution ensure its commitment and accountability?**

**YES.**

- The institute publishes a prospectus. The institute also gives the affiliating university course structure and academic regulations hand book to each enrolled student. Apart from these, the institute has been giving the course plans for all subjects to students as handout at the beginning of each semester.
- Through the prospectus, the institute highlights its history, programs offered, and achievements in past years among other things. Through the affiliating universities handbook, the course structure of the program and regulations relating to credits, attendance, internal assessment and syllabus for each subject is outlined. Through the handout given on course plans, the over plan of lecture delivery is made known to the students.
- The college publishes bi annual Newsletter which provide the information about student events like seminars, Academic Calendar, Workshops conducted, Orientation & Awareness Programmes, Professional society and Departmental association activities and Achievements and activities of Students and Faculty members.
- In addition, the departments publish quarterly/half-yearly **News Letters.**

**5.1.2 Specify the type, number and amount of institutional scholarships/free- ships given to the students during the last four years and whether the financial aid was available and disbursed on time?**

**YES.**

The following financial assistances are extended by the institution to students

- Free transport for all SC/ST hostel students
- Gold Medals and Silver Medals to the best performers of the academic year.
- A cash incentive to the tune of Rs.35,000/- ( tuition fee) to each class topper in every branch(aggregating to about Rs. 12,00,000/- per year).
- Reimbursement of TA, DA and Registration fee for participation in Technical paper presentations/ Quiz competitions.
- Providing T.A. & D.A. for the participation in Extramural Sports, Cultural & Literary Events.
- Providing Free Transport to the students using library facility beyond

class hours.

- Transport is free for all local industry visits
- Partial reimbursement of TA for industrial tours

The details of financial aid given by the institution during the last four years is as follows:

S.No	Year	Amount
1	2013-14	Rs. 18,66,335/- (till date)
2	2012-13	Rs. 38,66,234/-
3	2011-12	Rs. 15,92,388/-
4	2010-11	Rs. 8,66,335/-

### 5.1.3 What percentage of students receive financial assistance from state government, central government and other national agencies?

Details of financial Assistance (Fee reimbursement) from A.P. State Govt.

Category	Percentage(%)			
	2010-11	2011-12	2012-13	2013-14
SC	15.32	13.95	13.53	13.49
ST	2.55	3.07	2.96	2.88
BC	58.45	59.80	58.70	60.85
EBC	19.45	18.94	21.07	19.18
PHC	0.39	0.25	0.14	0.12
Minorities	3.83	3.99	3.59	3.48

### 5.1.4 What are the specific support services/facilities available for SC/ST, OBC and economically weaker sections

- All SC /ST students receive financial assistance in the form of tuition fee, maintenance charges and pocket money from the Government as per the Government regulations.
- The college library issues book bank facility from which SC,ST students can borrow additional books.
- OBC/BC Students also receive financial assistance in terms of tuition fee and maintenance charges.
- The college arranges additional training / remedial classes for academically lagging students.
- Class counselor stake special attention of slow learners, identifying their academic deficiencies.

#### Physically challenged/other disabled students?

- Physically challenged students receive scholarship of Rs. 520/- per month from social welfare department.
- Such students have a provision of availing additional time at the time of their taking the exam.
- Class and examination rooms are arranged on the ground floor.
- The College is providing Railings, Tricycles and special toilets suited to them.

**Overseas students**

- There are no overseas students in this college.

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

- The college extends financial support to students participating in various competitions/conferences in India.
- Good number of students secure prizes in Inter University, and Inter Collegiate events.

**Medical Assistance to Students : Health center, health insurance etc.**

- The college has a qualified medical officer Dr.G.V.Ramana Murthy Raju, MBBS (Regd.No.5957) and auxiliary nurse midwife Mrs. V. Krishna Veni, who are working in the institute since its inception. i.e., since the last 16 years, to provide general medical assistance. Also the institute has a First Aid Medical Examination Room with other necessary medical equipment and facilities.
- The medical room is provided with two beds, stretcher and wheel-chair. First-aid kits are available with all laboratories, library, workshop, hostels etc.

**Organizing Coaching Class for Competitive Examinations:**

- In house GATE coaching classes are conducted by both internal and external faculty.
- In addition, the departments provide guidance to their students preparing for competitive examinations like CAT/GRE/TOEFL through Placement Cell
- The college has sufficiently well stocked library books for CAT/GRE/ TOEFL
- **Skill development(spoken English, computer literacy, etc.,)**
- The college has the following laboratories to enhance skills:
- **ELCS Lab** :for developing communication skills.

**Support for slow learners:**

- Remedial classes are arranged for the slow learners. Student counselors continuously monitor their progress.

**Exposure of students to other institutions of higher learning/Corporate/business houses, etc.**

- Students are encouraged & guided to participate in events organized by other institutions. Industrial visits are arranged for the students for practical exposure. Workshops on entrepreneurship development are organized to enhance the interests of students to start their own business/industry.

**Publication of student magazines**

- Departmental student associations bring out semi-annual Technical Magazines.

**5.1.5 Describe the efforts made by the institution to facilitate entrepreneurial skills, among the students and the impact of the efforts.**

- MVGR College of Engineering proposed to set up an ED cell within the campus. The proposal was successfully through the AICTE Norms, and has been approved (F. No: 8022/RID/EDC (71)/2008-09).

Additionally, AICTE has extended funding of INR 7 Lacs to the campus for the activities of the newly established ED Cell for the duration of three years beginning from April, 2009 and going through to April 2012.

- In line with the objectives of the EDC, specifically, incubation—as recommended by AICTE, the college has set up separate infrastructural facilities including seminar hall, systems, library exclusively housing literature relevant to entrepreneurship. Further, a committee at the institution level consisting of members of the faculty with aptitude from all the departments was constituted to periodically meet, discuss and recommend activities that would help the budding students equip themselves with information and knowledge related to entrepreneurship.
- The institution also constituted an Advisory board consisting of members drawn from District Industries Center, NABARD, MSME, APITCO Ltd., Lead Bank and Naval Science and Technological Laboratory, in addition to representatives from the institution. Since its inception, the cell effectively leveraged the services of various governmental and nongovernmental executives to contribute to EDC.

The following efforts are made by the institution to impart entrepreneurial skills to students:

2013-14

S.No.	Title	Resource Person	Target Audience	Date / No of Hours	No.of Students Attend
1	Soft Skills Training	Mr.S. Mohan Kumar Mr. K. V Ratna Kumar Ms. D. Swathi Patnaik Mr. D.V. Raghu Vamsi Ms. M.S Kamala Kumari Ms. A. Rajya Lakshmi Mr. A. Mahesh Kumar. Ms. L. Sujatha Mr. D. Krishna	Final year B.Tech & MCA	18 hrs(17-10-2013 to 18-10-2013)	524

2	<b>Mock Interviews</b>	Dr. Sumit Gupta Dr.C. Kalyan Chakravarthy Dr. G. Suvarna Kumar Dr. V.Nagesh Prof. P. Seetha Rama Raju Mr. L. Raghava Kumar Mr. P. Srinivas Rao Mr. K. Praveen Mr. D. Nagendra Kumar Mr. P.L.N Raju Mr. G. Srikanth Ms. Jayasree Mr. B.Ramesh Raju Mr. ALN Srinivasa Rao Mr.M.V.V Bhanu Mr. Kalyan Kumar Mr. Chandra sekhar Mr. Sai Prasad Mr. K.Ajay Mr. T. Narayana Rao	Final year B.Tech & MCA	10hrs (07-11-2013 to 08-11-2013)	508
3	<b>Campus Recruitment Training (FACE)</b>	Ms. Reethika Mr.Bala Ms.Sangeetha Ms. Saketha Mr. Sidharth <b>-FACE</b>	Final year B.Tech & MCA	13Days i.e(78 hrs) (01-09-2013 to 11-09-2013) & (20-09-2013 to 22-09-2013)	508
4	<b>Pre-Placement Talk</b>	Mr. Jyotirmay Jena Head - Talent Acquisition TCS Hyderabad,-TCS	All Eligible Students of B.Tech/ MCA	11-11-2013	496
5	<b>TCS IT IS Recruitment Talk</b>	Mr. Ramu Yerra Senior Manager, TCS Hyd.	All Eligible Students of B.Tech/ MCA	11-11-2013	230

6	<b>Personal Interview Skills</b>	Mr. Srikanth <b>3 Orbs</b>	Final year B.Tech & MCA	08-11-2013	502
7	<b>Employability Skills Workshop</b>	Mr. M.S.R. Murthy, Senior Manager, TCS, Hyderabad	Final year B.Tech & MCA	09-07-2013	504
8	<b>Programming Skills Training</b>	Mr. Ram Sekhar Mr. Sujan Mr. Rama Krishna Talent Sprint, Hyderabad	Final year B.Tech & MCA	150 Hrs (Summer Vacation in the Month of May and June ,2013)	126

**2012-13**

S.No.	Title	Resource Person	Target Audience	Date / No of Hours	No.of Students Attend
1	<b>Soft Skills Training</b>	1.Mr.S. Mohan Kumar 2. Mr. K. V Ratna Kumar 3. Ms.D. SwathiPatnaik 4. Mr. D.V. Raghu Vamsi 5. Ms. M.S Kamala Kumari	Final year B. Tech & MCA	24 hrs (12-08-2012 TO 18-08-2012)	443
2	<b>Aptitude Training</b>	1. Dr. P. GovindaRao 2. Mr. Ch. VenkataRao 3. Mr. M. Krishna Sastry 4. Mr. S. AtchutaRao 5. Mr.B.M.V Krishna	Final year B. Tech& MCA	18hrs (12-08-2012 TO 18-08-2012)	436

3	<b>Campus Recruitment Training</b>	Md. Abdullah Mr.P.V. Rama Sasank Mrs.Deepti Abdullah Ms. Jaya Lakshmi, Mr. Rajesh P Mr. Srinivas M Mr.Aditya Lanka Ms. Jyothsana Ms. Vijayanthi P <b>-CONDUIRA</b>	Final year B. Tech& MCA	32hrs(14-05-2012 to 23-05-2012) 24 hrs(19-11-2012 to 24-11-2012)	377
4	<b>Pre-Placement Talk</b>	Mr. K. Suryanarayana, L&D- Corporate CLP <b>-TCS</b>	All Eligible Students of B. Tech/ MCA	03-09-2011	408
5	<b>Campus Recruitment Talk</b>	Md. Abdullah <b>Conduira</b>	All Eligible Students of B. Tech/MCA	29-08-2011	406

**2011-12**

S.No.	Title	Resource Person	Target Audience	Date / No of Hours	No.of Students Attend
1	<b>Soft Skills Training</b>	1.Mr.S. Mohan Kumar 2. Mr. K. V Ratna Kumar 3. Ms.. D. SwathiPatnaik 4.. Mr. D.V. Raghu Vamsi 5 . Ms. M.S Kamala Kumari	Final year B. Tech& MCA	24 hrs (05-09-2011 TO 12-09-2011)	372
2	<b>Aptitude Training</b>	1. Dr. P. GovindaRao 2. Mr. Ch. VenkataRao 3. Mr. M. Krishna Sastry 4. Mr. S. AtchutaRao 5. Mr.B.M.V Krishna	Final year B. Tech& MCA	18hrs (05-09-2011 TO 12-09-2011)	365



3	<b>Campus Recruitment Training</b>	Md. Abdullah Mr.P.V. Rama Sasank Mrs.Deepti Abdullah Ms. Jaya Lakshmi, Mr. Rajesh P Mr. Srinivas M Mr.Aditya Lanka Ms. Jyothsana Ms. Vijayanthi P <b>-CONDUIRA</b>	Final year B. Tech& MCA	12 hrs(29- 8-2011 TO 02- 09- 2011)18 Hrs (06- 06-2011 to 12- 06- 2011)	388
4	<b>Pre-Placement Talk</b>	Mr. Raj Gopal Senior Consultant - TCS	All Eligible Students of B. Tech/ MCA	27-06- 2012	418
5	<b>Campus Recruitment Talk</b>	Mrs. Deepti Abdullah <b>Conduira</b>	All Eligible Students of B. Tech/M CA	27-09- 2012	410

**2010-11**

S.No.	Title	Resource Person	Target Audience	Date / No of Hours	No.of Students Attend
1	<b>Soft Skills Training</b>	1. Mr.S. Mohan Kumar 2. Mr. D.V. Raghu Vamsi 3.Mr. G. Ramesh 4. Mr. D. SwathiPatnaik 5. Mr. K. V Ratna Kumar	Final year B. Tech& MCA	18hrs FN(11- 07-2010 to 17- 07- 2010)	390
2	<b>Aptitude Training</b>	1. Dr. M. Saba Siva Rao 2. Dr. S. Sankar 3. Mr. M. Krishna Sastry 4. Mr. S. AtchutaRao 5. Mr.B.M.V Krishna	Final year B. Tech& MCA	24 hrs AN (11- 07-2010 to 17- 07- 2010)	396

3	<b>Campus Recruitment Training</b>	Sri K.Suryanarayana Smt . N. Lalitha Mrs. Vindya S Ayyar Ms. Lata Rani Buddha Mr. Praveen Kumar - <b>CEFIL</b>	Final year B. Tech& MCA	60 hrs	409
4	<b>Pre-Placement Talk</b>	Mr.RanodeepSen HR - <b>TCS</b> Mr.Justin,Sr.HR - <b>Intergraph</b> Mr.AjayChandraSa dhuneni, Vice president - <b>Globarena</b> Mr.D. MadhuSudhan - <b>Adroitec</b>	All Eligible Students of B. Tech/ MCA	30-11-10 19-01-11 13-05-11 09-05-11	408
5	<b>Campus Recruitment Talk</b>	Chandra SekharJonnalagadda ,ARM- <b>TCS</b>	All Eligible Students of B. Tech/MCA	18-11-2010	406

**5.1.6 Enumerate the policies and strategies of the institution which promote participation of students in extracurricular and co-curricular activities such as sports, games, Quiz competitions, debate and discussions, cultural activities etc.**

**Promotion of participation of students**

- Provides Sports Track Suit to students for participating in major tournaments.
- Encourages participation in inter collegiate tournaments conducted in Cricket, Volleyball, Basketball, Tennis, Table-Tennis, Athletics etc.,
- Presents merit certificates and mementoes to winners and runners in intramural competitions for boys & girls at College Annual Sports Day celebrations.
- Encourages participation in co-curricular activities.
- Provides TA, DA to students participating in extracurricular and co-curricular activities such as sports, games, Quiz competitions, debates, cultural activities etc.
- Due consideration in respect of attendance for students participating in important literary, cultural or sports events outside the college.
- Conducts inter collegiate tournaments, cultural competitions.
- Conducts coaching camps to enhance their capabilities in sports and games events.
- Well furnished amenities block
- Separate Gymnasium facility for boys and girls.

**a) Additional academic support, flexibility in examinations:**

- Academic support is provided for all those students participating in extracurricular activities in the form of arranging compensation classes. Due consideration in respect of attendance for the students participating in important literary, cultural or sports events outside the college.
- Since the college has to follow the examination time tables of the affiliating university, there is no scope for deviation from examination schedule.

**b) Special dietary requirement, sports uniform and materials:**

- College provides sports uniform to all the students participating in the inter-collegiate/inter University events and provides dietary supplements for such students.
- The college spends approximately Rs.2.5 Lakhs annually on consumable sports material.
- Special diet is provided for students in their coaching camps.

**c) Any other:**

- The following committees are formulated to enhance student participation in extracurricular activities
  - Sports and Games Committee
  - Cultural Committee
- In addition to the above committees, the college also provides basic needs to the neighbors servicing to villages through NSS Unit and also partially meets the neighboring service organizations.

**5.1.7 Enumerating on the support and guidance provided to the students in preparing for the competitive exams, give details on the number of students appeared and qualified in various competitive exams such as UGC-CSIR- NET, UGC-NET, SLET, ATE / CAT / GRE / TOEFL / GMAT/ Central/State services, Defense, Civil Services, etc.**

- The departments provide guidance and conduct coaching classes to students for taking competitive examinations like GATE/CAT/GRE/TOEFL.
- Language lab has interactive software which enables the students to prepare for GRE and TOEFL examinations.
- Large number of books on career guidance and competitive examinations are available in Library.

**No. of Students qualified in GATE**

Academic	CHE	CIV	CSE	ECE	EEE	MEC	IT
2013-14	7	12	2	13	15	08	
2012-13	9	15	6	12	18	28	
2011-12	7	-	24	10	26	33	
2010-11	5	-	15	11	15	12	

**No. of Students qualified in GRE/TOFEL/CAT/MAT/PGECET etc**

Academic	CHE	CIV	CSE	ECE	EEE	MEC	IT
2013-14	-	2	-	13	08	--	
2012-13	-	3	2	14	12	14	
2011-12	3		-	15	11	10	
2010-11	1		-	12	13	03	

**5.1.8 What type of counseling services are made available to the students (Academic, personal, career, psycho-social etc.)**

**Academic Counseling:**

- College has constituted a dedicated team of Faculty to counsel the students academically. There will be academic coordinators and counselors to look after the problems faced by academically poor or irregular students.
- Counsellors are allotted for each class or group of students to provide academic and personal guidance. Usually, one faculty member is assigned as counselor for a group of 20 students. By this way, all the students of the college are benefited.

**Personal Counseling:**

- An exclusive counseling and guidance cell is set up to attend the problems of newly admitted students. Psychiatric counseling is made available in the campus through a qualified counselor
  - Counselor's Name :Dr. K. Suneetha
  - Qualification :Ph.D. (Psychology)
- A Grievance Redress Cell is constituted to look into the grievances of students and to attend their problems.

**Career Counseling:**

- Soft Skill Training Programmes are periodically conducted with internal resource persons. Also, students are trained through external corporate training agencies like, Globarena, FACE, TIME, etc. Training & Placement Cell regularly conducts Group Discussions and also Orientation Programmes. Mock Interviews are conducted to identify and improve the skill set of the students.

**5.1.9 Does the institution have a structured mechanism for career guidance and placement of its students? If 'yes', detail on the services provided to help students identify job opportunities and prepare themselves for interview and the percentage of students selected during campus interviews by different employers (list the employers and the programmes).**

YES.

The college has a structured mechanism for career guidance and placements of its students.

**Training and Placement Cell**

- Training and Placement Cell is an integral part of the institute. Training & Placement Office facilitates the process of placement of students passing out from the Institute besides collaborating with leading organizations and institutes in setting up of

internship and training program of students. The institute has provided complete infrastructure to conduct group discussions, tests and interviews besides catering to other logistics for effective functioning of the T&P cell.

- The cell is sensitized to function all through the year in an effort towards preparing the prospective students for the campus selection programmes. T&P cell modules the engineering & management grades to young corporals.
- The office liaises with various reputed industrial establishments, corporate houses across the country, which conduct campus interviews and select graduate and post-graduate students from all disciplines.
- The industries which approach the institute come under the purview of “Core Engineering industries, IT & IT enabled services, Consultancy Firms, Finance Companies, Marketing Houses & Management Organizations”. Pre-Placement Talks are also conducted in this regard as per mutual convenience.
- Job offers, dates of interviews, selection of candidates etc. are announced through the Training & Placement Office.
- The Placement Office is assisted by a committee comprising representatives of faculty & students from the under-graduate and post-graduate engineering & management streams, headed by a Training & Placement Officer. The committee evolves a broad policy framework every year besides a set of rules which are inviolable. Student members are closely co-opted in implementing these policy decisions.
- The T&P team comprising Dean T&P, Training and Placement Officer, one Office Assistant and Departmental Placement Coordinators.

#### Team

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- Smt Y Lalitha, MCA,+91- 94419-09898
- Sri M Vinod Kumar, ECE,+91-73820-90083
- Sri M V V Bhanu, MBA,+91-95028-08520
- Sri A Vara Prasad, Civil,+91-98662-58114
- Sri B Somi Naidu, Mechanical, +91-73821-93034

For better connectivity with students, T&P cell is operating pages in community sites like Facebook



[/mvgrplacementcell](https://www.facebook.com/mvgrplacementcell)

#### **Special Training on English Language and Communication Skills**

The College conducts special training classes on English Language and

Communication Skills to improve the communication skills of students. It also helps the students to improve their technical presentation and interview performance skills.

#### **Regular Training on Aptitude & Other Soft Skills**

Regular training on aptitude and soft skills is provided to the students at pre-final and final year level both by the external and internal resource persons.

#### **Special customized training based on Industry requirement**

The suggestions of industry representatives on the Board of Studies of individual departments are taken to identify the customized training needs of individual departments. Industry relevant customized training is provided to final year students before the commencement of recruitment process. In addition, guest lectures are arranged on specialized areas relevant to the present day industry.

#### **Campus Recruitment**

Efforts are being made by the institution to improve the employability of the students. Industries are invited to the campus to recruit students. For the past four years all the eligible and interested candidates are absorbed by the industry before completion of the course. Students interested in higher education in & abroad are guided and recommended.

#### **5.1.10 Does the institution have a student grievance redressal cell? If yes, list(if any)the grievances reported and redressed during the last four years.**

YES.

The Grievance Redressal Committee headed by the Dean Training and Placements & PG Courses, comprises 5 senior faculty members of various departments and 2 non-teaching staff members. The composition of the cell is as follows:

Sl.No	Name	Position Held
1	Dr.M.Sunil Prakash , Dean T&P and PG	Convener
2	Mr.S.Chandramouli, Prof of CE	Member
3	Mrs.B.Aruna Kumari, Assoc Prof of CSE	Member
4	Mr.M.Venu Madhav, Assoc Prof of EEE	Member
5	Mr.G.V.S.K. Reddyi, Assoc Prof of	Member
6	Mr.E.R.Satyanarayana, Chargeman	Member
7	Mrs.P.Ramadevi, Library Asst	Member

#### **Grievance conveying procedure:**

1. **Open door policy:** Grievances can be through direct approach or through phone to the committee.
2. **Grievance and Redressal committee boxes:** Drop the grievances in the Grievance and Redressal Committee boxes in the departments.
3. **Email:** Grievances can be sent to the email id [grievances@mvgrce.edu.in](mailto:grievances@mvgrce.edu.in) of the Grievance and Redressal committee.

#### **Grievance Redressal Procedure:**

1. A student/staff shall first present his/her complaint verbally /in writing to

the concerned Head of the Department .The Head of the Department is required to solve /address the issue within 2 days.

2. If the student/staff is not satisfied or his/her complaint was not addressed within 2 days ,He/she can approach the GRC
3. If the student/staff is not satisfied or his /her complaint was not addressed within 7 days by GRC , He /She can approach the Ombudsman.

**The basic functions of the GRC are:**

1. It conducts a thorough enquiry on the complaints received from the aggrieved students and staff.
2. It submits the enquiry report to the Principal, with its recommendations on suitable penalty / punishment to be imposed.
- 3 The Principal, on receipt of the above report, gives an opportunity to the student(s) against whom the complaint was lodged to explain his / her case.

The Principal will convene the College Academic Council meeting in this regard to decide on the measures to be taken. In special cases the opinion of the College Management will also be taken before imposing the punishments / penalties.

**5.1.11 What are the institutional provisions for resolving issues pertaining to sexual harassment?**

The college has a Women Empowerment Cell which addresses the grievances of girl students regarding sexual harassment. The composition of the cell comprises one senior lady faculty member as convener and one lady faculty member from each department. The composition of the cell is as follows:

Convener	Ms. Rajyalaxmi
Coordinator	Ms.D.Swathi Patnaik
Members	
Faculty	Students
Ms.Padma (CHEM )	Miss Ayesha (IT)
Ms. Sujata(MCA)	Miss Arpitha ( IT)
Ms. Lavanya (ECE)	Miss Uma maheshwari (MECH)
Ms.Navya(CSE)	Miss Hasitha (Civil)
Ms. Swarna(IT)	Miss Mounika (CSE)
Ms. Annapurna (Civil)	Miss Amrutha (CSE)
Ms. Lalitha(Maths)	Miss Bhavana (ECE)
Ms. Madhavi (MBA)	Miss Sree Kavya (MBA & MCA)
Ms. Deepika (MECH)	Miss Meena (EEE)
	Miss Depthi (CHEM)

This cell looks after the welfare of girl students and lady staff members.

**Objectives :**

1. To motivate and inspire girl students in their pursuit for excellence
2. To Promote awareness among girl students on occupational, legal and constitutional rights.
3. To educate girl students on women specific health issues and measures to be taken.
4. To sensitize girl students on gender equality and to further encourage them to advocate gender equality within the community.



5. To make girl students realize their strengths and be empowered.

**Role and responsibilities of WEC:**

Ever since the inception of the committee, WEC as a team has been striving to promote awareness among girl students and educate them on gender specific issues in the areas such as health, legal, career and social. To realize the above mentioned objectives, the committee with its members strive to:

1. To periodically organize guest lectures in the concerned areas such as health, legal, career and social aspects.
2. To monitor and counsel girl students of their department, in the case of requirement.
3. To advise and support any girl student, if faced by any gender specific problem.
4. To conduct competitions such as presentations, elocution, essay writing and painting to encourage girl students to express their ideas.
5. Above all, to ensure a secure and progressive learning environment for the girl students.

**Activities held in the Academic year 2013-14**

- March 8<sup>th</sup> 2013: International Women's Day was celebrated. Awareness program on the police protection entitled to girl students was organized. Krishna Prassanna, DSP Vizianagaram town was the chief guest and speaker of the occasion.
- November, 2013: WEC organized a lecture exclusively for 1<sup>st</sup> year girl students on "dress code and etiquette within the campus and guidelines" by senior faculty Ujwala kanthi prabha mam, ECE Department, MVGR.
- November 25<sup>th</sup> 2013: A competition in oral and power point presentations for 2<sup>nd</sup> year B.Tech, 2<sup>nd</sup> year MBA and MCA girl students was conducted on the topics: 1. Malala Yousafzai and her influence on today's woman. 2. Gender Discrimination- socio cultural consequences
- December 21<sup>st</sup> 2013 : The International girl child day" was celebrated by WEC. On this occasion an expert talk on "CANCERS SPECIFIC TO WOMEN" was organized and Dr. Jyothi doka, Gynecologist Mahatma Gandhi cancer hospital, Visakhapatnam.
- Feb 1<sup>st</sup>, 2014: W.E.C represented MVGR college in the workshop on "Women Entrepreneurship" organized by the MR college for women, Vizianagaram. Girl students from various departments and WEC representatives participated in the workshop
- March 1<sup>st</sup>, 2014: Debate and Essay writing competitions were conducted as part of International Women's Day celebrations.
- March 6<sup>th</sup>, 2014: A Competition in Power point presentations on the work place challenges faced by women was conducted for 3<sup>rd</sup> year girl students.
- March 8<sup>th</sup> 2014: A legal expert talk was organized as part of International Women's Day celebrations. Chall mahalakshmi, Senior advocate, Visakhapatnam graced the occasion as chief guest and addressed the girl students on the legal support entitled to women and how to utilize them in the case of necessity.
- April, 2014: A "Senior to Junior talk" was organized By WEC for the 3<sup>rd</sup> year girl students. students selected through campus placements were invited to share their pre- interview and interview experiences with the



students to guide and motivate them.

**5.1.12 Is there an anti-ragging committee? How many instances (if any) have been reported during the last four years and what action has been taken on these?**

YES.

The College has an anti-ragging committee. The Committee (as per clause 6(a) of AICTE Regulations) shall comprise of the following members:

S.No.	Name	Designation	Position
1	Dr.K.V.L. Raju	Principal	Chairman
2	Prof.D.J.J.Ramachandra Raju	Vice-Principal(Admin)	Member – Convener
3	Smt.M.KanakaDurga	Sr. Civil Judge Vizianagaram	Member
4	Sri B.L. NarasingaRao	Social Worker District Legal Services Authority	Member
5	Sri Srihari Raju	Circle Inspector-Bobbili (rural)	Member
6	Mr. P. SrinivasaRao	Assoc. Prof	Member
7	Mr.G.Anjaneyulu	Assoc. Prof.	Member
8	Mr.P.RaviKiranVarma	Assoc. Prof.	Member
9	Dr.B.SarvaRao	Assoc. Prof	Member
10	Mr. V. Vinay	Asst. Prof.	Member
11	Mr.K.V.Subba Raju	Asst. Prof.	Member
12	Mr. Ch. BhavaniSankar	Asst. Prof.	Member
13	Mr.P.L.N.Raju	Asst. Prof.	Member
14	Mr. R S U M Raju	Asst. Prof.	Member
15	Ms. EVPAS Pallavi	Asst. Prof.	Member
16	Dr.K.Suneetha	Psychologist	Member
17	Mr.M.YkuntaRao	Physical Director	Member
18	Mr M. Surya Rao	F/o M. Divya (09331A0835)	Member
19	Mr. Subhash Chandra	F/o P Siva Prasad (10331A0841)	Member
20	Ms G.V.V. Shilpa	Student (11331A0820)	Member
21	Mr. C. Arun Kumar	Student (11331A0454)	Member

**The basic functions of the cell are:**

- The Committee will examine the issues related to ragging in its totality taking into consideration various resolutions passed earlier by regulatory bodies like AICTE, APSCHE, JNTUK etc., as well as the orders passed by various courts including the Hon'ble Supreme Court and make recommendations to the Principal for further action in the matter
- To create self-confidence and congenial environment among the

newly admitted students by way of conducting frequent interactive sessions to clear the doubts related to academic matters, social interaction and compatibility

- Staff (teaching & non-teaching) is deputed at various locations inside and outside of the college campus to monitor the student activities.
- To conduct an enquiry and identify of the culprits on receipt of complaint.
- Based on the first hand information and prime-facie evidence, the committee submits its report to the Principal for necessary disciplinary action.
- No ragging instances took place for the last four years in the campus

**5.1.13 Enumerate the welfare schemes made available to students by the institution.**

- Amenities building which provides facilities like canteen, indoor games,
- Gymnasium, reading room and waiting rooms for boys and girls separately.
- Financial support and needed facilities to physically challenged students
- Provision of giving Scholarships/fee Waiver by the Management.

**5.1.14 Does the institution have a registered Alumni Association? If 'yes', what are its activities and major contributions for institutional, academic and infrastructure development?**

YES.

MAA - An Alumni Association of MVGR has been formed by the students of the college.

- The MAA came into being in the year 2007 with Dr. K.V.L. Raju, Principal, MVGR as the Chief Patron and old students from different batches as the office bearers. This is an association with society number 100/2007, registered with Govt of Andhra Pradesh, Registration and Stamps Department, Office of the District Registrar, Vizianagaram.
- Now that the Alumni can get in touch with the college whenever they want to, and from wherever they are. The main idea behind this is to update the students of the latest happenings in the college. All the outgoing students are the members of the Association. Reflections, the annual alumni get-together, enable all of the Alumni to refresh the memories of their college days. Reminiscing has never been so easy!.
- Open up a world of opportunities, made possible by an exchange of talent, product information and knowledge sharing. Membership of the MAA gets the student listed on the MAA Online Directory.

**The objectives of the Alumni Association are:**

- To provide a forum for the Alumni of the Institute.
- To promote the professional interests of the Alumni.
- To further the cause of Science and Technology.
- To strengthen liaison between the Alumni and MVGR.
- To engage in such academic and social activities as to promote fellowship among Alumni.
- The Association at present has about 8500 members. During the last fourteen years, all students admitted to the Under-Graduation and

Post-Graduation Courses become members of the Association. Alumni Association has organized several programmes such as reunions, seminars, and colloquia on topics of current interests. Talks by experts from various disciplines of MVGR have been arranged for projecting future lines of R & D work.

- The Alumni spread around the globe, support the college in various activities. It organizes yearly meet either in College or Hyderabad or USA every year.

**Alumni association organizes various events like:**

- Assisting Internship Programs for students from III & IV year
- Referral Job Placements for IV year & passed outs.
- Funding assistance & guidance for students higher studies.
- Assisting Industrial Visits
- Guiding Project Works
- Workshops & Guest Lectures to students on latest technologies, job profiles.
- Supporting economically weak students.
- Donating books, journals & e-material to the college library.
- Assisting College Infrastructural development.

**Alumni Contribution:**

- Every alumnus joins the association with Rs1000/Rs500 as registration fee.
- Alumni donate for various activities.
- All contributions through a registered bank account will be used for various activities.

**Team Alumni**

Dr KVL Raju, Principal, MVGR:	Chief Patron
Vikramaditya, 1997-2001 ECE:	President
Naveen, 2001-2005 CSE:	Vice President
Praveen Kalla, 1998-2002 Mech:	General Secretary
Bhaskar Tej, 1997-2001 Mech:	Joint Secretary
Venu Gopal Rao, 1997-2001 Mech:	Joint Secretary
Sree Ram, 1999-2003 Chemical:	Treasurer

**In-house team**

Santosh, 2000-20004 Chem  
 Vamsi Krishna, 2001-2005 CSE  
 Satyanarayana Reddy, 2003-2007 IT  
 Satyanarayana Raju, 2000-2004 ECE  
 Pavan, 2003-2007 EEE  
 Varun, 2003-2007 Mech  
*Web masters*  
 Kalyan Raju, 2005-2009 ECE

## 5.2 Student Progression

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

Student Progression	percentage of students progressing to higher education or employment	
UG to PG	2010-14	CE-15%;ME-19.64%;ECE-14.42%; CSE-15%; IT-10%, CHEM 10.4%
	2009-13	CE-22.72%;ME-76%;ECE-34%; CSE-10.6%; IT-12%, CHEM 28.4%
	2008-12	ME-80%;ECE-28%; CSE-15.15%; IT-11%, CHEM 35.8%EEE-4%
	2007-11	EEE-2%;ME-84%;ECE-25%; CSE-11.36%;IT-2.5%
PG to M.Phil.	---	
PG to Ph.D	---	
Employed •Campus selections	2010-14	265
	2009-13	220
	2008-12	238
	2007-11	245
• Other than campus recruitment	2010-14	ECE-10%; CHEM 3%
	2009-13	EEE-2%;ME-31%; ECE-10%; CHEM 16.4%;CSE 15% IT 5%
	2008-12	EEE-7%;ME-40%;ECE-23%; CSE-12%, IT 4%, CHEM 20.9%
	2007-11	EEE-8%;ME-37%;ECE-20%; CSE-10%, IT 2%, CHEM 29.9%

**5.2.2 Provide details of the programme wise pass percentage and completion rate for the last four years (cohort wise/batch wise as stipulated by the university)? Furnish programme-wise details in comparison with that of the previous performance of the same institution and that of the Colleges of the affiliating university within the city/district.**

There is no grading system for the colleges affiliated to JNTUK, Kakinada.

**Programme-Wise Success Rate(pass%) for the last Five Years**

Batch	B. Tech						
	CHEM	CIV	CSE	ECE	EEE	MECH	IT
2006-10	83	-	81.44	90.91	98.41	77.27	85.25
2007-11	85.7	-	86.01	91.61	93.75	77.94	84.62
2008-12	86.3	-	80.17	92.54	96.87	86.76	74.6
2009-13	87.3	84.13	91.12	90.15	88.05	87.12	71.21
2010-14	-	-	-	-	-	-	-

Batch	M. Tech					P G Courses		
	MD	CSE	CNIS	VLSI	SE	Batch	MBA	MCA
2009-11	100	66.67	-	94.4	-	2007	-	100
2010-12	100	61.11	83.33	94.4	-	2008	96	95.83

2011-13	100	66.66	100	94.1	-	2009	98	84.75
2012-14	In project					2010	96	88.13
						2011	97	93.75

### 5.2.3 How does the institution facilitate student progression to higher level of education and/or towards employment?

#### *AY 2013-14*

- Programming Skills Training (JAVA) was conducted by Mr. Ram Sekhar, Mr. Sujan, Mr. Rama Krishna of Talent sprint, Hyderabad for 120 Hrs in the Month of May and June ,2013
- Mr. MSR Murthy, Delivery Head, TCS has given a lecture on “Employability skills and technology Expectations” for CSE, ECE & IT final year students on 09-07-13
- Awareness on Mission R&D, Microsoft was given by Dr.Venkat Rao, TPO, GVP College of Engineering for III<sup>rd</sup> B.Tech CSE & IT students on 31-07-2013
- Globarena E-Mentoring System (GEMS) conducted a one hour online assessment on 1<sup>st</sup> and 2<sup>nd</sup> August 2013 for all the 3<sup>rd</sup> and 4<sup>th</sup> year students.
- Conducted Pre talk on Mission R&D by Mr.Perraju on 27-08-13
- Conducting Corporate Recruitment Training (CRT) program for final year students from 01-09-2013 to 10-09-2013. (FACE)
- Conducted a program on Personal Interview Skills by Mr. Srikanth 3 Orbs for IV-I sem students on 08-11-2013
- Pre-Placement Talk was given by Mr. Jyothirmay Jena, Head- Talent Acquisition, TCS Hyderabad on 11-11-2013
- IT IS Recruitment Pre-placement Talk was given by Mr. Ramu Yerra, Senior Manager, TCS Hyd, on 11-11-2013
- Employability Skills workshop was organized by JNTUK, REEMAP and MVGR on 25<sup>th</sup> & 26 Feb, 2014 for the final year students
- On line placement assistance exam AMCAT was conducted for CSE, ECE, EEE, IT & MCA final year students on 09-03-2014
- Mentoring sessions for 3<sup>rd</sup> year students were conducted by Globarena on 27-03-2014 & 28-03-2014
- FDP on “PLM and Engineering Automation” by TCS, Hyderabad was conducted on 30<sup>th</sup> May, 2014

#### *AY 2012-2013*

- Corporate Recruitment Training was given to the IV-I Sem students by Conduira
- Mr.Shakir has motivated the Final Year B.Tech students by taking classes on 19-07-2013
- Mr.Rajagopal of TCS has delivered a guest lecture on Employability skills to the final year students on 27-06-2013
- Campus Recruitment Talk was delivered by Mrs. Deepthi Abdullah, Conduira on 27-09-2012
- Pre-Placement Talk was given by Mr. K. Suryanarayana, L&D-Corporate CLP -TCS on 03-09- 2011
- A briefing session on GATE was conducted by JGATE to the 3<sup>rd</sup> year students on 07-10-2013

- Globarena has conducted Online assessment test for 4<sup>th</sup> year on 23-01-2013 and for 3<sup>rd</sup> year students on 24-01-2013

#### **AY 2011-2012**

- Dr.K.V.S.G.Murali Krishna, Professor of CIVIL Engg, JNTUK motivated the Final Year B.Tech students by taking classes on 06-01-2012
- Dr.Sowmya Misra , DIG, VSP has given a lecture on women empowerment to the girl students on 10-03-2012
- Mr.Venkata Raju of BOB Technologies has delivered a talk on Placements on 27-04-2012
- Corporate Recruitment Training(CRT) was given to the IV-I Sem students by Conduira
- Pre-Placement Talk was given by Mr. Raj Gopal, Senior Consultant – TCS on 27-06-2012
- Campus Recruitment Talk was delivered by Md. Abdullah, Conduira, 29-08-2011

#### **AY 2010-2011**

- Corporate Recruitment Training(CRT) was given to the IV-I Sem students by CEFEL
- Campus Recruitment Talk was delivered by Mr.K.Suryanarayana to the final year students
- Pre-Placement Talk was given by Mr. Jyothirmay Jena, Lead Aquisition –TCS
- Guest Lecture was delivered on Trends, Design Methodologies and Opportunities in
- VLSI Design, by Mr.S.Shanmukha Rao, Circuit Design Engineering Manager, LSI Research and Development India Limited on 28-06-10.
- Guest Lecture was delivered on Simulation of Electron beams System, Trends in High Power Microwave Devices by Sri R.Suryanarayana Raju, Scientist ‘G’, CEERI, Pilani on 28-06-10
- Guest Lecture was delivered on Cloud Computing and Grid Computing by Sri Praveen K.Kumar,(2004-2008 IT Alumni) on 19-07-2010
- A seminar on Free Education in Germany-Earn while Studying & settle in Germany, by Operation Manager Ms.Sabine Strecker, Dresden,Germany on 11-08-2010

#### **5.2.4 Enumerate the special support provided to students who are at risk of failure and drop out?**

- Remedial Classes are arranged for the students who are at risk of failure And drop out.
- Conducting frequent Counseling by the class teachers.
- Discussions with the parents
- Special coaching is being provided in the form of extra class hours.

#### **5.3 Student Participation and Activities**

##### **5.3.1 List the range of sports, games, cultural and other extracurricular activities available to students. Provide details of participation and program calendar.**

###### **a) Sports & Games Facilities:**

The department of Physical Education looks after the Games and Sports

activities. The department is headed by two qualified Physical Directors and the required infrastructure.

The college has exclusive amenities block for indoor games and also has well developed play grounds for Cricket, Basketball, Volleyball, Shuttle Badminton, Kho-Kho, Kabaddi etc.

- Mr.M.Vyunkunta Rao, Asst. Professor In Physical Education Awarded Best Coach By Hon'ble Vice-Chancellor
- Mr A Rama Chandra Raju was appointed as a JNTUK inter university Volley Ball selection Committee Member for the years 2010, 2011 and 2012

The students who have represented JNTUK university and the winners for the past four years are given below

#### **Details Of Sports Activities 2013-14**

The following students are represented JNTU K inter university Teams In Various Games & Sports 2013-14

a) B. Santhi 4/4 Chem	Kho-Kho
b) Ch. Srilakha 4/4 Chem	Kho-Kho
c) B.Sushmith 1/4 Cse	Tennis
d) R.Mohan 2/4 Chem	Cricket
e) Y M.Naik 2/4 Mech	Cricket
f) N.Laxman Rao 4/4 Chem	Ball Badminton
g) N. Nishanth 1/4civil	Athletics
h) K.Akhil 2/4 Civil	Volley Ball
i) T.Pavan 1/4civil	Foot Ball
j) G.Arpathi 1/4cse	Foot Ball
k) Ravi Sankar 2/4 Cse	Foot Ball
l) N.AGestya 2/4 Ece	Hockey

#### **Details Of Sports Activities 2012-2013**

- College Ball Badminton team won the 1st Place In JNTU K Central Zone Tournament.
- The students selected for JNTU K Inter University Teams In Various Games & Sports:
  - K.Jatin Roshan Civil 4/4 Basket Ball
  - K.Akhil Civil 1/4 Volley ball
  - M.phinendar MBA Ball Badminton
  - K.Sankara rao Taekwondo
  - B Divakara Rao 4/4 IT Cricket
  - Muni Swamy Naik 2/4 Mech Cricket
  - R Mohan 1/4 Chem Cricket

#### **Details Of Sports Activities 2011-12**

- The Ball Badminton team of the college won the 1st Place In JNTU K Central Zone Tournament.
- The students selected for JNTU K Inter University Teams In Various Games & Sports:
  - I.Bharat Bhushan-Foot Ball
  - Ch.Rajesh Yadav-Cricket(Jntuk Cricket Team Captain 2011-12)
  - D.Venkatesh-Volley Ball
  - P.Jyothsna Roop- Tennis
  - Avinash - Ball Badminton
- College organized Inter University Zone-1 JNTU K Cricket Team Selections.



- College organized Inter University South Zone JNTU K Cricket Team Coaching Camp.
- College organized Eenadu, Vizianagaram Trophy.

#### **Details Of Sports Activities 2010-11**

- The Ball Badminton team of the college won the 1st Place In JNTU K Central Zone Tournament.
- The students selected for JNTU K Inter University Teams In Various Games & Sports
  - Teja Sree-Shuttle Badminton
  - I.Bharth Kumar- Tennes
  - P.Swatha- Tennes
  - S.Venkatesh - Ball Badminton (JNTU K Cricket Team Captain 2010-11)
- College organized Eenadu Vizianagaram Trophy.

College has cultural committee with following objectives

#### **Objectives of Cultural Committee:**

The Committee will orient the students towards standards of equality, justice and a humanist culture

The Committee creates a platform that provides the students with an opportunity to display creative talents in a variety of ways

The Committee gives scope for the students to relax and enjoy campus life amidst rigorous academics and never ending student initiatives under the umbrella of clubs/committees

#### **Literary and Cultural activities:**

- Literary and Cultural activities pertaining to Annual day are under the supervision of cultural committee.
- All the Departments also conduct such activities every year regularly
- as a part of their respective Department Association activities every year.
- Annual Literary and cultural activities are being organized yearly
- Competitions are conducted on special occasions like independence day, youth day, women's day, teachers day, engineers day, birth anniversary of Dr. P. V. G. Raju,
- The following tables provide the information of the literary and cultural competitions.

#### **5.3.2 Furnish the details of major student achievements in co-curricular, extracurricular and activities at different levels: University / State / Zonal/National/International, etc. for the previous four years.**

##### **Co-curricular Activities**

Participation of Students in Poster Presentations, Technical Exhibition, Technical Quiz

<b>Activity</b>	<b>No. of Students Participated</b>	<b>No. of Students Won the Prizes</b>
Poster Presentations	25	6
Technical Exhibition	15	4
Technical Quiz	18	4

#### **5.3.3 How does the college seek and used at a and feedback from its**



**graduates and employers, to improve the performance and quality of the institutional provisions?**

- The Exit feedback is taken from all the outgoing students every year seeking their opinion on the instructions and delivery, infrastructural facilities, library facilities, computing facilities, games & sports facilities, training facilities, support to placement activity, etc. The feedback of the students is compiled and all the suggestions made by the students are taken into consideration for effective improvements.
- The employers of the organizations are requested to give their feedback on the performance of the Alumni of the college employed in their organizations and this feedback is utilized to modify their methodology of teaching to suit industrial needs.

**5.3.4 How does the college involve and encourage students to publish materials like catalogues, wall magazines, college magazine, and other material? List the publications/ materials brought out by the students during the previous four academic sessions.**

Each department brings out quarterly/ half yearly department newsletters providing information with regards to the achievements and other activities of the department and also provide opportunities to students and faculty to communicate the latest developments in science and technology and also their opinions in the form of articles as follows;

- Students are given the required motivation and conceptual help for preparing technical papers at National level paper contests and financial support is provided as per norms.
- Department encourage the students to prepare and is play the working models during, Departmental Association Day Celebrations and Engineers Day Celebrations.

**5.3.5 Does the college have a Student Council or any similar body? Give details on its selection, constitution, activities and funding.**  
**YES.**

The following are the Student Associations of the different departments of the college.

CIVIL : Association of Royal Civil (ARC)  
CSE : IEEE CS Student Branch Chapter (01921A)

MECH : SAE INIDIA MVGRCE Collegiate Club  
ECE : IEEE Student Chapter

The following are the activities undertaken by the departmental associations

1. Expert Lecture
2. Technical Talk
3. Technical Quiz
4. General Quiz
5. Aptitude Test
6. Workshop
7. Group Discussion

8. Essay Writing
9. Cultural events

**5.3.6 Give details of various academic and administrative bodies that have student representatives on them.**

Taking cognizance of important role of students in different academic and administrative activities, students are nominated as members of various committees.

**Academic Bodies**

- Class Monitoring Committee
- Library Committee

**Administrative Bodies**

- Anti Ragging committee
- Women Empowerment Cell
- Hostel Committee
- Canteen Committee
- Teachers day, Engineers day, Technical Fest, Annual Sports and College day committees.
- Student chapters of IETE, IET, CSI, SAE etc

**5.3.7 How does the institution network and collaborate with the Alumni and former faculty of the Institution.**

**a) Network with the Alumni:**

- For better connectivity between College and Alumni, Alumni and Alumni, MAA on its own maintains a website, which is one of its kinds in alumni associations. The url: [www.mvgr-aluni.org](http://www.mvgr-aluni.org)
- Along with the website, MAA operates pages in community sites like:
  - Facebook - <https://www.facebook.com/MVGR.Alumni.Association>
  - Twitter - <https://twitter.com/mvgralumni>
- The members of college administration and the senior faculty of all the departments participate in the annual or semi-annual alumni meetings on invitation and seek their advice and support for the development of the institution.
- The departments seek the opinion / suggestions of alumni on various developmental activities by sending mails to them and requesting them to fill the pro forma supplied in this regard.

**b) Network with the Former Faculty Members:**

- The department invites the former senior faculty to deliver guest lectures and also to extend their expertise in Research and Development.

**CRITERION-VI****GOVERNANCE, LEADERSHIP AND MANAGEMENT****6.1 Institutional Vision and Leadership****6.1.1 State the vision and mission of the Institution and enumerate on how the mission statement defines the institution's distinctive characteristics in terms of addressing the needs of the society, the students it seeks to serve, institution's traditions and value orientations, vision for the future, etc.?****Vision**

Maharaj Vijayaram Gajapathi Raj College of Engineering strives to become a centre par excellence for technical education where aspiring students can be transformed into skilled and well-rounded professionals with strong understanding of fundamentals, a flair for responsible innovation in engineering practical solutions applying the fundamentals, and confidence and poise to meet the challenges in their chosen professional spheres.

**Mission**

The management believes imparting quality education in an atmosphere that motivates learning as a social obligation which we owe to the students, their parents/guardians and society at large and hence the effort is to leave no stone unturned in providing the same with all sincerity. Towards that end, the management believes special focus has to be on the following areas:

- Have on-board staff with high quality experience and continuously updating themselves with latest research developments and sharing that knowledge with students.
- Having a well stream-lined teaching learning process that is continuously assessed for effectiveness and fine-tuned for improvement.
- Having state-of-the-art lab and general infrastructure that gives students the necessary tools and means to enhance their knowledge and understanding.
- Having a centralized department focused on improving placement opportunities for our students directly on campus and coordinating the training programs for students to complement the curriculum and enhance their career opportunities.
- Having advanced research facilities and more importantly atmosphere to encourage students to pursue self-learning on advanced topics and conduct research

**6.1.2 What is the role of top management, Principal and Faculty in design and implementation of its quality policy and plans?**

- The institution, MVGR College of Engineering is governed by the MANSAS Educational Trust. The college is governed by well-defined Quality Document.
- The college set out with clear vision and well defined quality

policy in tune with vision. The vision and quality policy are disseminated and implemented by laying out a clear set of mission statements which are tasked to specific groups and would lead to the objectives that realize the vision and quality policy.

- The Principal of the college is the head of the institution and provides requisite leadership to the system.

**Correspondent: Dr. A. Raghava Rao**

Correspondent is the Executive head of the educational institutions of the promoting society. He coordinates the activities of the institution in tune with the policies and guidelines of the promoting society, approved from time to time by the governing body of which he is a member.

**Principal: Dr. K. V. Lakshmipathi Raju**

The Principal is the chief academic and general administrator of the college. Principal is the executive head of the institution and is the bridge between the Management and the Institution. The Principal works with Deans, Vice-Principals, Asst. Principals, Heads of Departments, Heads of co-curricular, extra-curricular and service Departments and Senior Faculty heading various task committees in identifying resource requirements, preparing proposals and placing them before the College Management Committee, of which he is a member.

**Vice-Principals: 1. Prof. D. J. J. Ramachandra Raju (Admin)  
2. Dr. Y.M.C. Sekhar (Academics)**

**Asst-Principals: 1. Sri P. Ranga Raju (Admin)  
2. Dr. Ch. Purnachandra Rao (Academics)**

The two Vice-Principals and two Asst-Principals would report to the Principal and have overall responsibility for Administration and Student Affairs.

**Dean (R&D): Dr. R. Ramesh**

The Dean (R & D) reports directly to the Principal and is responsible for planning, executing and reviewing all activities that fall under Research and Consultancy.

**Dean (Civil Infrastructure): Dr.K.Rajeswara Rao**

The Dean (Civil Infrastructure) reports directly to the Principal and is responsible for planning, executing and reviewing all activities that fall under Civil Infrastructure.

**Dean (Placements & PG Courses): Dr. M. Sunil Prakash**

The Dean (PG Courses) reports directly to the Principal and is responsible for planning, executing and reviewing all activities that are connected to PG (5 M.Tech. courses and MBA & MCA) Courses. Also responsible for planning, execution of all activities that fall under Placement & Training.

**Heads of the Departments:**

1	<b>Dr. Ch. V. Subbarao</b> HoD-CHEM	8	<b>Prof. P. Sitha Rama Raju</b> Professor & HoD-CSE.
2	<b>Dr.P.Markandeya Raju</b> HoD-CIVIL	9	<b>Dr. R.Ramana Reddy</b> Professor. & HoD-ECE
3	<b>Dr.K.S.S. Rama Raju</b> Professor & HoD-M.B.A	10	<b>Dr. R. GowriSankaraRao</b> Professor. & HoD-EEE
4	<b>Dr.S.Sreenivasa Rao</b> Professor & HoD-M.C.A.	11	<b>Dr. V. Nagesh</b> HoD-I.T.

5	<b>Dr.P.GovindaRao</b> Professor & HoD-MAT	12	<b>Dr.S. Adinarayana</b> Professor & HoD-Mech.
6	<b>Dr.G.Srinivasa Reddy</b> HoD-PHY	13	<b>Dr.T.V.N.P.Sarathi</b> Professor & HoD-CHY.
7	<b>Mr.S.Mohan Kumar</b> HoD-E&H	.	

HODs are responsible for the functioning of the departments as per the laid down policies of the college. They can sanction incidental expenses and adhoc purchases up to a maximum amount of Rs.10, 000/-. Prepare the annual budget for their respective departments. HoDs are largely responsible for academic loads, smooth and effective conduct of class room and laboratory learning, coordinate internal assessments/examinations, to support and promote continuous learning among colleagues, to bring about and ensure synergy among the services rendered by both teaching and non-teaching.

#### 6.1.3 What is the involvement of the leadership in ensuring:

- the policy statements and action plans for fulfillment of the stated mission
- formulation of action plans for all operations and incorporation of the same into the institutional strategic plan
- Interaction with stakeholders
- Proper support for policy and planning through need analysis, research inputs and consultations with the stakeholders
- Reinforcing the culture of excellence
- Champion organizational change

The feedback received from all stakeholders will be critically reviewed; analyzed and remedial actions will be initiated. The management encourages the participation of the staff in the process of decision-making in institutional functioning.

The personal interaction of the Principal with various stakeholders, the faculty, the non-teaching staff, the students, the guardians play an important role in this. This apart, information available in student feedback forms and information available in self-appraisal forms of teachers help the authorities plan proper support for the policies.

The participatory role of the management encourages and sustains the involvement of the college staff, which is necessary for the efficient and effective running of the College.

- Organization of various student development activities
- Organizing coaching classes to GATE and Competitive examinations
- Joint ventures with premier institutions and industry.

#### 6.1.4 What are the procedures adopted by the institution to monitor and evaluate policies and plans of the institution for effective implementation and improvement from time to time?

- College is committed to the aspects of continuous improvement and evolving modified strategies for the betterment of quality. The decisions taken by Governing Body will be adopted by Sub-committee for implementation.
- The governing body of the Institution carries responsibility for ensuring effective management of the institution and for planning its future development. The governing body looks after the affairs of the institution and demonstrates the primary objectives of teaching and research. It includes considering and approving the strategic plan for the institution, setting the academic aims and objectives of the institution, and identifying the financial, physical and staffing strategies. The members of the body are eminent personalities such as educationalists, philanthropists and industrialists etc.
- The Governing Body constitutes Members from the Society, nominees from AICTE, Industry, University, State Government and Faculty from the Institute.
- The Principal of the college, at the helm of the affairs, has complete autonomy to govern the institution within the purview of the rules and regulations framed by the government and affiliating university.

**6.1.5 Give details of the academic leadership provided to the faculty by the top management?**

Management and top Management will provide adequate freedom to faculty for strengthening teaching–learning process, academic advancement, nurturing multifaceted talent in students. Faculty will be at liberty to formulate plans for supporting slow learners, preparing required learning material, organizing various programmes for curricular and extracurricular abilities, encouraging enthusiastic learners for professional competency, designing new experimental setup in laboratories, taking up in house R &D projects. The freedom of action will motivate faculty for creative and innovative practices, coordination and teamwork.

**6.1.6 How does the college groom leadership at various levels?**

The institute practices decentralization and delegation at all levels to ensure transparency in decision making. The following is the organizational structure:

**Committees:**

The following committees are functioning for smooth running of the Departments and Colleges:

- Academic Committee
- Disciplinary Committee
- Anti- Ragging Committee
- Grievance Redressal Committee
- Transport Committee
- Exam Cell Committee
- Library Committee

- Hostel Committee
- Canteen Committee
- R&D Cell
- Purchase Committee
- Internal Quality Audit Cell
- Sports Committee
- Training & Placement Cell Committee
- Entrepreneurship Development Cell
- Career Guidance Cell
- Consultancy & Sponsored Projects Cell
- Cultural Committee & Student Affairs

**6.1.7 How does the college delegate authority and provide operational autonomy to the departments/ units of the institution and work towards decentralized governance system?**

The Organization and Governance of the college is done through a transparent and well defined organizational structure to facilitate smooth and effective functioning, geared towards optimum utilization of all resources. College provides operational autonomy to all the departments.

**6.1.8 Does the college promote a culture of participative management? If 'yes', indicate the levels of participative management.**

**YES**

- The institution is run by academicians. All the sub-committee members who are the management representatives are eminent academicians.
- The head of the institution has complete academic and operational autonomy and with his rich vein of academic experience, the head of institution ensures the overall teaching and learning process is effective and meets the ever changing demands of the stake holders.
- The institution has an institutionalized process of encouraging and harnessing participative management at all levels and almost all faculty members are involved in one or the other administrative process in addition to being involved in their regular teaching duties. This ensures the faculty members feel involved in decision making process and the institution has found that this kind of involvement also makes the faculty be more committed to the decisions make the appropriate decision making body with due involvement of faculty members.
- The institution encourages the individual departments to come up with budget proposals for the upcoming academic year after internal discussion based on broad guidelines and the proposals thus received are reviewed by the institute academic committee. This allows the budget proposals to address the ground level



needs of the departments and helps in ensuring budget gets allocated to the right areas.

- The institute has high-level faculty committees for Research & Development, Training and Placement among other things that help drive efforts in their respective areas across the institution on a consistent basis and in line with institution's objectives in these areas.

## 6.2 Strategy Development and Deployment

### 6.2.1 Does the Institution have a formally stated quality policy? How is it developed, driven, deployed and reviewed?

**YES**

#### **QUALITY POLICY**

We should continuously reach higher quality benchmarks in training students on all skills expected of a technical professional through:

- A meticulously planned yet flexible learning process administered:
  - By accomplished teachers who are encouraged to keep in touch with latest developments in their respective areas of interest.
  - With state-of-the-art infrastructure providing a stimulating learning environment.
- Continuous assessment of the effectiveness of learning processes through stake holders' feedback.
- Continuous fine-tuning aimed at improvement.

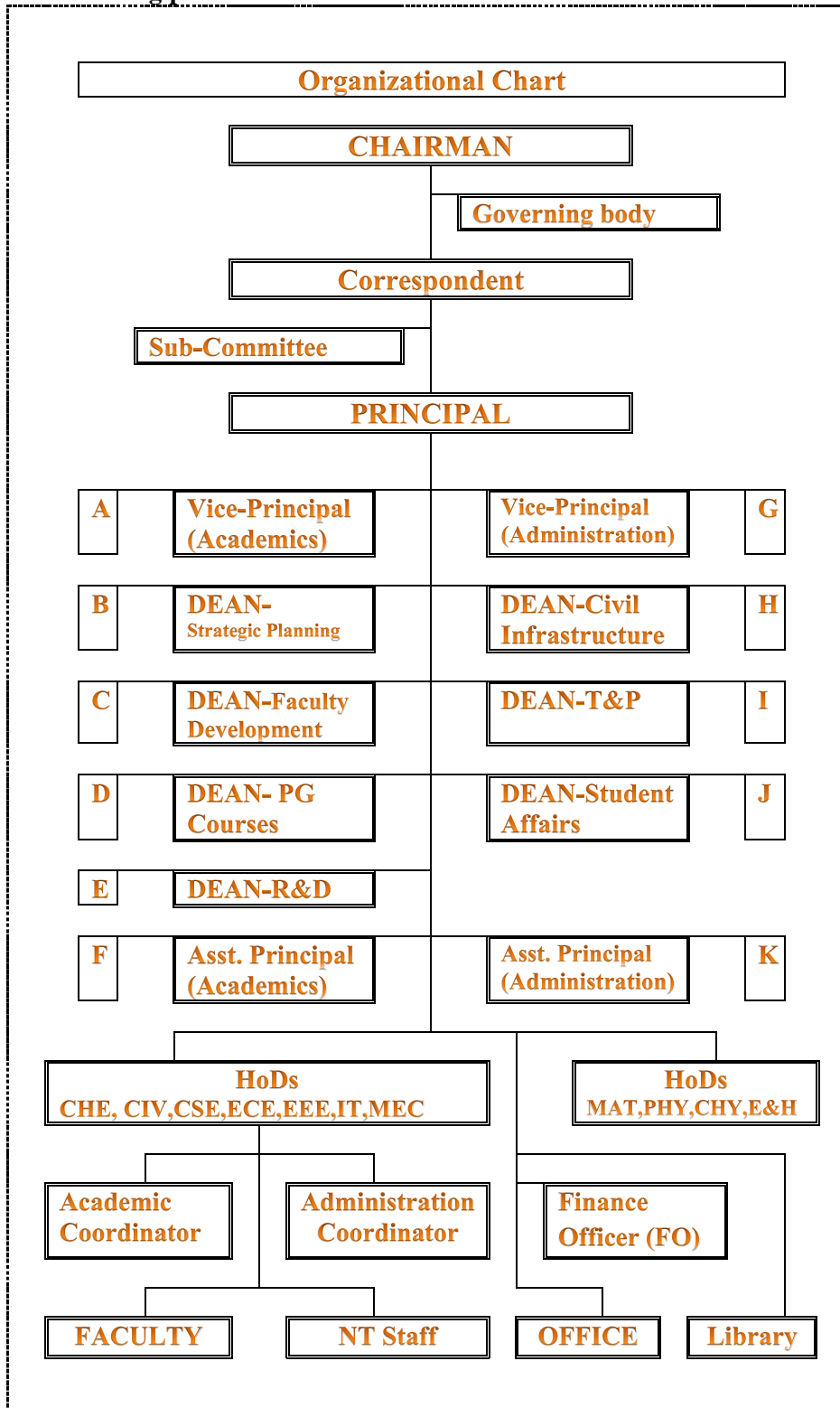
### 6.2.2 Does the Institute have a perspective plan for development? If so, give the aspects considered for inclusion in the plan.

- The institute administrative committee comes up with the draft perspective institutional plan after deliberations. This draft is then discussed by the head of the department with staff members of different academic and administrative departments. The meetings are meant to explain the ideas in draft plan and seek suggestions. The ideas that come up from these meetings are then accumulated and put up for discussion before administrative committee which then prepares a final draft perspective plan taking into consideration all suggestions before forwarding it to the management for approval. The students are not directly involved in the process but their voice is duly represented through their feedback which is one of the parameters considered by administrative committee before coming up with draft plan.
  - In line to the views of the Society, college determines the needed infrastructure for academic advancement, bringing excellence into the activities and allocates budget accordingly.
    - Allocation of budget taking up in house R&D a same assure to improve research activities
    - Networking all the classrooms for effectively implementing ICT
    - Development of e-learning materials



- Industry specific projects

**6.2.3 Describe the internal organizational structure and decision making processes.**



**6.2.4 Give abroad description of the quality improvement strategies of the institution for each of the following**

- Teaching & Learning**
- Research & Development**
- Community engagement**
- Human resource management**
- Industry interaction**

**Teaching & Learning:**

- Provision of State-of-the art learning resources in Central Library & Information Centre and department libraries.
- Ergonomically designed classrooms with networking facility
- Provision of e-classrooms
- Development of student support material
- Organisation of Remedial classes
- Delivery of Add-on-courses
- Conduct of pre-placement training classes and campus connect programmes
- Conduct of GATE coaching classes
- Structured course files and lab manuals on all courses
- Academic audit
- Continuous improvement of resources

**Research & Development**

- Formulation Research committee
- Allocation of budget for in house R&D
- Incentives and rewards for publications/research
- Financial assistance to students for model buildings

**Community Engagement**

- NSS activities
- Blood Donation Camps
- Free medical camps
- Development of models for facilitating learning in schools

**Human Resource Management**

- Transparent policy document
- Transparent and scientific way of selections
- Imparting related training
- Formulation and communication of policies of the college
- Support for academic advancement
- Systematic performance appraisal system and guidance to the faculty
- Systematic promotion policies
- Democratic way of administration with participative management

**Industry interaction**

- Organisation of industrial tours
- Deputing faculty and staff for industrial training
  - Guest lectures by the experts from industry
  - Collaboration with industries

**6.2.5 How does the Head of the institution ensure that adequate information (from feedback and personal contacts etc.) is available for the top management and the stakeholders, to review the activities**

**of the institution?**

The management and head of the institution are always in interactive mode with each other. The head of institution and Management get the feedback from parents, alumni, industry, teachers, students and the public with regards to the teaching quality, curriculum, extra-curricular activities and infrastructural demands. In the meeting of the Governing Body the information gathered from different sources are discussed with the participating members. After thorough discussion and deliberations the existing facilities and activities of the institution are reviewed and decisions are taken for further improvements after going through the available resources and modalities. The decisions taken and activities of the institute will be communicated to all stake holders through college website and newsletter published by the college.

**6.2.6 How does the management encourage and support involvement of the staff in improving the effectiveness and efficiency of the institutional processes?**

Management encourages the participation and in initiation by the faculty in policy decisions. A qualitative suggestion of any member finds place in decision making. A systematic and participative management feature of the institution leads to the determination of right things. After making decision, concerned committees will implement with true spirit with the guidance and cooperation of all the members. Thus promoting belongingness in faculty and staff pave ways for effectiveness and efficiency.

**6.2.7 Enumerate the resolutions made by the Management Council in the last year and the status of implementation of such resolutions.**

**MVGR COLLEGE OF ENGINEERING :: VIZIANAGARAM  
MINUTES OF 15<sup>TH</sup> GOVERNING BODY MEETING HELD ON  
28.01.2013 AT 11.00 A.M.**

S.No	AGENDA	RESOLUTION
1	To review the minutes of earlier Governing Body Meeting	Discussed and noted
2	a) Overall performance of the batch 2009-2013	The committee while appreciating the faculty for their academic contributions sought improvements in the department of Information Technology and recommended necessary measures
	b) To review the results of 2 <sup>nd</sup> , 3 <sup>rd</sup> & 4 <sup>th</sup> B.Tech., 1 <sup>st</sup> & 2 <sup>nd</sup> semester examinations together with 1 <sup>st</sup> year annual performance for the academic year 2012-2013	Though the academic performances are satisfactory, the space for improvement is reasonable and therefore can be explored further for increased performance
3	c) The following Civil works have been successfully executed during the last academic year 2012-13	Discussed and noted

	d) During the current academic year 2013-14, the following works have been proposed to be undertaken	Discussed and noted
	e) To consider construction of 1 <sup>st</sup> floor of Civil Engineering Block 22000 sft at an estimated cost of Rs.1.75 crore	Discussed and recorded
4	To discuss and review details of symposiums/FDPs/Workshops/Conferences conducted and to be conducted	Discussed and noted
5	To review status of new course proposals made during the academic year 2012-13 and also sanctions for the current academic year. Also to discuss proposals for the introduction of new courses for the academic year 2014-15. Additional intake/new program proposed for 2013-14 Intake approved for the academic year 2013-14 Programs being proposed for the academic year 2014-15	Discussed and recorded
6	To review communications received from AICTE/JNTU/Technical Board/Council for the Higher Education	Discussed and recorded
7	To review the current staff i.e., new recruits & staff who left: <ul style="list-style-type: none"> <li>a. Staff recruited during the period from 29.01.2013 to 11.01.2014</li> <li>b. Total 227 nos. of faculty are working in the institution, 178nos. of faculty were ratified through University Selection Board.</li> <li>c. Teaching Staff: Professors-38, Associate Professors-38, Sr. Asst. Professors-09 &amp; Asst. Professors-142</li> <li>d. Qualification of Teaching Staff – 227nos. Ph.D – 51 MCA/MBA/M.Tech/M.Sc – 164 B.Tech – 12</li> <li>e. Qualification improved by Non-Teaching Staff – 3nos.</li> <li>f. No. of publications: National Journals – 88 International Journals – 121 National Conferences – 65 International Conferences – 35</li> <li>g. Staff left during the period from 29.01.2013 to 11.01.2014 Teaching staff – 11 Non-Teaching staff - 07</li> <li>h. To discuss academic leaves from 29.01.2013 to 11.01.2014 Teaching staff – 05 Non-Teaching staff – 01</li> </ul>	Discussed and recorded
8	To discuss placement through campus/off campus drives for the period 2012-13 (220) & 2013-14 (106)	Discussed and noted

9	A) To review compliance – Budget 2012-13 B) To discuss and approve proposed budget for the academic year 2013-14	Reviewed and resolved to recommend the proposed budget
10	To discuss and ratify the proposal for AICTE with regard to GATE scholarship for the academic year 2013-14	Discussed and ratified
11	To discuss and record MOUs with industry	Discussed and noted
12	To discuss and record sanctions and proposals made to/by Fee Fixation Committee	Subsequent to fee fixation committee visits and review meeting of management with Fee Fixation Committee Meeting dt.19.11.2013, dt.06.08.2013, the following fee structure have been sanctioned by Fee Fixation Committee for the block period of 2013-14 and 2015-16 MBA – Rs.41,100/-, MCA – Rs.30,000/- 1 <sup>st</sup> B.Tech – Rs.63,900/-, 2 <sup>nd</sup> B.Tech – Rs.58,500/-
13	To review and record QIP/Research achievements : Total Ph.D - 54nos., in addition 74nos. of faculty have registered for Ph.D of which 20nos. are at the verge of completion	It was recommended to further incent wise research
14	To discuss and consider application for Autonomy	The members recommended to speed-up the application for autonomy
15	To discuss and record proposals for re-accrreditation by NBA & NAAC	Discussed and recorded
16	Proposals for registration as Research centres – Mechanical, Chemical, ECE & CSE	Discussed and recorded – It was also requested that a proposal be made for research centre recognition – the department of Civil Engineering
17	Proposals for collaboration with WIPRO – VLSI Technologies	Discussed and recommended
18	Collaboration with TCS for community services and professional development – ALP & AIP	Discussed and recorded
19	Any other item with the permission of the Chairman	The members suggested the following: a) The members placed on record their best wishes to Dr.G.S.N.Raju, a member of Governing Body nominated by AICTE, on he assuming the charge of Vice-Chancellor of Andhra University with effect from 06.02.2013 b) <u>Dr.RAMA</u> : To institute endowment lecture on lineage/society c) The members also placed on record their best wishes on Dr.A.Raghava Rao, Correspondent being nominated as a member on Andhra University Senate.

19	a. Members also recommended if possible to conduct a course on “Research Methodologies” as an audit program to the faculty of the institution.
	b. <u>Dr.S.V.U.M.Prasad</u> : Suggested to further explore for increased funding from external agencies and patenting.
	c. <u>B.Tirumala Rao</u> : Suggested to increase incentives for Research contributions
	d. <u>Sri P.L.P.Raju</u> : To encourage active participation in cultural activities and also considered establishment of Solar Energy Park and auditorium
	e) <u>B.Tirumala Rao</u> : Anti plagiarism be installed and all the research works reported/recorded be subjected to validation
	f) The institution make serious effort to showcase itself and also involve for increased engagement with industry leading to improvements in placement record.

**6.2.8 Does the affiliating university make a provision for according the status of autonomy to an affiliated institution? If ‘yes’, what are the efforts made by the institution in obtaining autonomy?**

Yes, College is in the process of making proposal to UGC for the accord of Autonomous Status.

**6.2.9 How does the Institution ensure that grievances/complaints are promptly attended to and resolved effectively? Is there a mechanism to analyze the nature of grievances for promoting better stake holder relationship?**

College constituted various committees with regard to issues of grievances and other related mater.

- Grievances redressal
- Students counseling/mentoring
- Class monitoring
- Women empowerment cell

The institute has well defined grievance redressal procedure. Prompt and effective disposal of grievances of various stakeholders are being done. College constituted grievance and redressal committee with 4 faculties as members, 2 non-teaching staff and Dean– T&P as Convener. The committee thoroughly discusses the grievances and suggests the solutions for redressing the grievance to College Academic Committee (CAC). CAC reviews the suggestions and initiates suitable actions and communicates to Management for necessary steps to take.

**6.2.10 During the last four years, had there been any instances of court cases filed by and against the institute? Provide details on the issues and decisions of the courts on these?**

NIL

**6.2.11 Does the Institution have a mechanism for analyzing student feedback on institutional performance? If ‘yes’, what was the outcome and response of the institution to such an effort?**

College obtains feedback in several ways

- Students feedback

- Exit feedback
- Alumni feedback

College obtains student feedback twice in a semester one in the middle of the semester and these condone at the end of Semester/Year. In addition, class monitoring committees will provide feedback. After thorough analysis, the head of the department provides is views and suggestions and communicates the same to the concerned faculty. Needed support and guidance will be provided by senior faculty. The improvement of the performance of that faculty will be monitored through subsequent feedbacks.

### **6.3 Faculty Empowerment Strategies**

#### **6.3.1 What are the efforts made by the institution to enhance the professional development of its teaching and non-teaching staff?**

- Training teachers for excellence
- Sponsoring Faculty & Staff for higher education
- Sponsoring Faculty & staff for attending workshops, conferences at national and international level by granting academic leave
- Organizing Faculty Development programmes
- Organizing skill development programmes
- Organizing various professional development activities
- Encouraging faculty to deliver guest lectures
- Organization of professional society activities
- Providing industrial training to faculty
- Facilitating faculty to take up various roles in professional societies

#### **6.3.2 What are the strategies adopted by the institution for faculty empowerment through training, retraining and motivating the employees for the roles and responsibility they perform?**

- The college regularly organizes teacher training programme “**TRAINING TEACHERS FOR EXCELLENCE**” with experts drawn from NITTTR, Chennai
- Training to faculty on revised courses by eminent external faculty from industry and institution.
- Deputing faculty to refresher courses
- Guest lectures to faculty by eminent academicians from reputed institutions like IITs, NITs and industry
- Formulation of various committees with Faculty in various cadres as members with proper allocation of work, assigning responsibility and grant of adequate authority and autonomy.
- Participative strategy of management

#### **6.3.3 Provide details on the performance appraisal system of the staff to evaluate and ensure that information on multiple activities is appropriately captured and considered for better appraisal.**

##### **Performance appraisal:**

With an objective to develop a simpler but more effective and relevant evaluation system, a customized version of University Grants Commission’s Performance Based Appraisal System (PBAS), has been

brought in. The same has been named as Annual Self-Appraisal Report (SAR)

The evaluation system through SAR will have the following main aims:

- Helping faculty members recognize areas in need of development or improvement, and to capitalize on their areas of strength.
- Building a database that can be used for future promotions.
- Provide opportunities for discussion and feedback in order to identify problems, obstacles, or difficulties that hinder progress and institution development.
- Determining the intellectual value added by each faculty member in the period of assessment

The composition of SAR will be as follows

PART A

- General Information
- Academic Background

PART B -Academic Performance Indicators

- Teaching Learning Evaluation Related Activities
- Co-Curricular, Extension and Profession Related Activities
- Research Publications and Academic Contributions
- Other Relevant Information

**6.3.4 What is the outcome of their view of the performance appraisal reports by the management and the major decisions taken? How are they communicated to the appropriate stakeholders?**

- After review of the performance appraisal the committee offers suitable suggestions on the areas identified.
- Communication to concerned Faculty, providing support and guidance for improvement
- Guidance to Junior Faculty by the expert senior faculty of the same subject.

**6.3.5 What are the welfare schemes available for teaching and non teaching staff? What percentage of staff have availed the benefit of such schemes in the last four years?**

- EPF: Rs.780/-per month. College pay sits contribution of Rs.780/-month if the faculty member pays his contribution.100%of faculty and staff of availing the benefit.
- Health Insurance cover (Rs.50,000/- Mediclaim) and Personal Accidents (Rs.1,00,000/-). 100% of faculty and staff of availing the benefit.
- Transport Facilities: Free Transport for senior Professors. Non-teaching are provided free transport from Vizianagaram
- Medical Facilities: Free Medical consultancy provided through College Medical Centre.
- All the employees are extended with the following leaves:
  - Casual Leaves (15 days)
  - Medical Leaves(10 full paid /20 half paid)



- Earned Leaves-6 days in case of vacation staff &30 days non vacation staff
- Special Casual Leaves(7days)
- Maternity Leave(90 days with pay)
- Extra Ordinary Leave on Loss of pay
- Apart from these, faculty is granted academic leave for attending seminars/ conferences / workshops and attending research related works.

#### **6.3.6 What are the measures taken by the Institution for attracting and retaining eminent faculty?**

- Provides all basic amenities for comfortable stay at college during working hours.
- Provides lab and free internet facilities to all faculties.
- Encourages faculty by giving incentives for publishing papers at conferences and in journals.
- Regular increments are provided.
- Provides excellent research facilities and academic ambience for retaining eminent faculty.
- College provides academic freedom to the faculty to experiment new technologies and methodologies of teaching and learning facilities.
- Excellent research facilities provided by the college attract the faculty undergoing their research work.
- Pooled car facility to Professors at free of cost Dedicated computer and internet facility to faculty

### **6.4 Financial Management and Resource Mobilization**

#### **6.4.1 What is the institutional mechanism to monitor effective and efficient use of available financial resources?**

- Yearly proposals are prepared by Heads of various departments with the help of Financial Officer of the college and are forwarded to the Principal. Management Sub-committee vets the proposals for their compliance to regulating bodies' guidelines as well as developmental requirements of the institute in line with the mission & vision principal places the proposals to the Governing Body for approval. Funds would be spent from the approved budget. Recurring expenditure like establishment (salaries etc.), power, telephones, transport, maintenance and such other mandated payments due to affiliating and regulating bodies are adequately being met from internal accruals. Expenditure over and above the receipt, which largely constitute developmental budget in terms of equipment and civil infrastructure, the management makes suitable arrangements either through society funds or loans from financial institutions.
- MVGR College of Engineering has well defined organization structure with greater employee participation in various academic and administrative role and responsibilities. Budgetary allocations under

various heads of expenditure for given academic year are arrived at through a process of transparent and effective staff participation of departments. Departments periodically under the convenorship of Head of the Department, develop growth and action plan through faculty participative process.

**6.4.2 What are the institutional mechanisms for internal and external audit? When was the last audit done and what are the major audit objections? Provide the details on compliance.**

Every year, internal audit will be conducted by the committees appointed by the principal. After thorough verification, committees will submit their appraisals to the principal for follow up action. College accounts will be audited by the qualified chartered accountants. No major audit objections are identified.

**6.4.3 What are the major sources of institutional receipts/funding and how is the deficit managed? Provide audited income and expenditure statement of academic and administrative activities of the previous four years and there serve fund/corpus available with Institutions, if any.**

**Major Sources of Income:**

Details	2012-13 (In Lakhs)	2011-12 (In Lakhs)	2010-11 (In Lakhs)	2009-10 (In Lakhs)
Income	2,557.49	2,161.82	1,481.75	1,370.35
Academic Expenses	2,408.00	1,999.17	1,132.86	978.84
Administrative	145.09	143.94	92.81	89.66

**6.4.4 Give details on the efforts made by the institution in securing additional funding and the utilization of the same(if any).**

- College is adopting comprehensive resource mobilization policy as the student fee alone is not sufficient for its sustainable development. One major activity encouraged is R&D.
- Encouraging the faculty to actively involve in research and development. Research Incentives are being given for publication of papers in reputed journals and bearing the cost of attending national and international seminars.
- Encouraging the faculty to take up R&D projects from funding organizations such as AICTE,DST, UGC, DRDO, ISRO IE etc..

S. No	Scheme	Title of the Project	Dept	Year	Sanctioned Amount	Received Amount
1	AICTE - MODRO BS	Modernization of Chemical Reaction Engineering Laboratory	CHE	2012	10.4 L	10.4 L

2	AICTE - MODRO BS	Modernization of Fluid Mechanics Laboratory	CHE	2010	10.0 L	10.0 L
3	AICTE - SEMINAR GRANT	Students Symposium, CHEVIZ - 07	CHE	2007	1.0 L	1.0 L
4	AICTE - SEMINAR GRANT	Awareness of Aromatic & Medicinal Plants in Northern Andhra Pradesh	CHE	2007	1.0 L	1.0 L
5	District administration Vizianagaram	Environmental Testing Laboratory	CHE	2004	5.0 L	5.0 L
6	MODRO BS	Modernization of Networks and Security	CSE	2011	10 L	10 L
7	DST	-	CSE	2012	31,97L	31.67L
8	MODRO BS	Moderation of Microwave Laboratory	EEE	2010	15 L	15 L
9	MSME	Adaptive Traffic Control System	EEE	2011	6.25 L	1.25 L
10	MODRO BS by AICTE	Modernization of electrical Machines Lab	EEE	2014	16.8 L	13.44L
11	AICTE Seminar Grant	Power Quality Improvement in Hybrid Energy systems	EEE	20 14	1.5L	0.75L
12	DST	Development of artificial intelligence based decision making in open architecture control CNC	MEC	2009	39 L	31.9L
13	AICTE (RPS)	Investigation of combustion, Emissions, and vibrations of VCR diesel engines using blended fuels	MEC	2012	17 L	17 L
14	UGC	Vibration analysis of multi fuel VCR engine using non edible oil	MEC	2014	1, 70, 000	Yet to receive
15	UGC	Development of intelligent automated furnace handling system for carbon steels	MEC	2014	400,000	Yet to receive

16	Institute of Engineers	An efficient brain mr image segmentation for easy diagnostic process	IT	2013	1,50,000	50,000
17	UGC	Surfcatan impregnated chitosanas adsorbent for the removal of dies from indutrialefulents	CHY	2014	340,000	Yet to receive

## 6.5 Internal Quality Assurance System(IQAS)

### 6.5.1 Internal Quality Assurance Cell(IQAC)

**a)Has the institution established an Internal Quality Assurance Cell (IQAC)? If 'yes', what is the institutional policy with regard to quality assurance and how has it contributed in institutionalizing the quality assurance processes?**

YES.

Following is the composition of Internal Quality Assurance Cell:

#### **IOAC Committee**

Chair Person : P r i n c i p a l

Convener : Vice Principal (Academics)

Coordinator : Asst. Principal

Members : All Heads of the Departments

The policy of the institution with regard to quality assurances:

- Fixing quality parameters for various academic and administrative activities.
- Monitoring the organization of class work and related academic activities.
- Conducting Internal Quality Audits periodically to verify the effectiveness of measures taken in reaching the quality parameters.
- Documenting various programs/academic activities leading to quality improvement and reviewing their effectiveness in quality improvement/sustenance

**b).How many decisions of the IQAC have been approved by the management/authorities for implementation and how many of them were actually implemented?**

All the decisions of the IQAC were approved by management for implementation and 95% of them were actually implemented.

**c).Does the IQAC have external members on its committee? If so, mention any significant contribution made by them.**

NO.

**d). How do students and alumni contribute to the effective functioning of the IQAC?**

- The student members of Class Monitoring Committees offer their observations /views for enhancing teaching –learning process and conduct of various co-curricular/ extra-curricular activities in the institute.
- Alumni are very active and productive in analyzing the requirements of external environment and attributes of the other colleagues and communicating the remedial measures to be taken up at institution level.

**e). How does the IQAC communicate and engage staff from different constituents of the institution?**

- The IQAC constituted different sub committees in which most of the staff members are involved in formulating and executing the decisions of IQAC. The decisions of IQAC are widely communicated to staff members through circulars/notices.
- Different sub committees of IQAC

S.No.	Name	Designation	Position
<b>ASSESSMENT AND ACCREDITATION COMMITTEE OF CSE DEPT</b>			
1	Dr. Sumit Gupta	Professor & HoD – CSE	Member – Convener
2	Dr. C. KalyanChakravathi	Professor – CSE	Member
3	Mrs. B. ArunaKumari	Assoc. Professor – CSE	Member
4	Dr. P. Sateesh	Assoc. Professor – CHEM	Member
5	Mr. Pradeep Singh Jamwal	Sr. Asst. Professor – CSE	Member
<b>ASSESSMENT AND ACCREDITATION COMMITTEE OF ECE DEPT</b>			
1	Dr. R. Ramana Reddy	Professor-ECE	Member – Convener
2	Dr. Sk. MastanVali	Professor-ECE	Member
3	Mrs. P.U.K. Prabha	Assoc. Professor-ECE	Member
4	Mr. P. Surya Prasad	Assoc. Professor-ECE	Member
5	Mr. K. Rakesh	Assoc. Professor-ECE	Member
<b>ASSESSMENT AND ACCREDITATION COMMITTEE OF MECH DEPT</b>			
1	Dr. R. Ramesh	Professor-MECH	Member – Convener
2	Dr. S. Adinarayana	Professor-MECH	Member
3	Dr. N. Ravi Kumar	Professor-MECH	Member
4	Dr. L. V. VenuGopalaRao	Assoc. Professor-MECH	Member
5	Mr. B. A. Ranganath	Assoc. Professor-MECH	Member
	Dr. S. SrinivasaRao	Assoc. Professor-MECH	Member
<b>ASSESSMENT AND ACCREDITATION COMMITTEE OF EEE DEPT</b>			
1	Dr. R. GowrishankarRao	Professor-EEE	Member
2	Dr. Sarath Kumar Sahu	Professor-EEE	Member
3	Mr. I. Kranthikiran	Assoc. Professor-EEE	Member
4	Mr. M. VenuMadhav	Assoc. Professor-EEE	Member
<b>ASSESSMENT AND ACCREDITATION COMMITTEE OF IT DEPT</b>			
1	Mr. P. S. Sita Rama Raju	Professor – IT	Member – Convener
2	Mr. P. SrinivasaRao	Assoc. Professor – IT	Member
3	Dr. V. Nagesh	Assoc. Professor – IT	Member
4	Mr. T. Pavan Kumar	Assoc. Professor-IT	Member
<b>ASSESSMENT AND ACCREDITATION COMMITTEE OF CHEM DEPT</b>			
1	Mr. P. V. Gopal Singh	Professor-CJEM	Member – Convener
2	Dr.Ch. V. SubbaRao	Professor-CJEM	Member
3	Mr. D. Krishna	Assoc. Professor-CJEM	Member
4	Dr. B. SarvaRao	Assoc. Professor-CJEM	Member

ASSESSMENT AND ACCREDITATION COMMITTEE OF CIVIL DEPT			
1	Dr. P. Markandeya Raju	Professor-CIVIL	Member – Convener
2	Dr. S.S.S.V. Gopala Raju	Professor-CIVIL	Member
3	Dr. S. Chandra Mouli	Professor-CIVIL	Member
ASSESSMENT AND ACCREDITATION COMMITTEE OF S & H DEPTS			
1	Dr. P. GovindaRao	Professor-MAT	Member
2	Dr. G. Srinivasa Reddy	Assoc. Professor – PHY	Member
3	Dr. T.V.N. Parthasarathi	Assoc. Professor – PHY	Member
4	Mr. S. Mohan Kumar	Assoc. Professor – E&H	Member
ASSESSMENT AND ACCREDITATION COMMITTEE OF MBA DEPT			
1	Dr. K.S.S. Rama Raju	Professor-MBA	Member – Convener
2	Dr. G.V.S.S.N. Sanyasi Raju	Professor – MBA	Member
3	Mr. A.L.N. SrinivasaRao	Assoc. Professor – MBA	Member
ASSESSMENT AND ACCREDITATION COMMITTEE OF MCA DEPT			
1	Dr. S. SrinivasaRao	Professor-MCA	Member – Convener
2	Mr. G. Srikanth	Assoc. Professor – MCA	Member
3	Mrs. Y. Lalitha	Asst. Professor – MCA	Member

**6.5.2 Does the institution have an integrated framework for Quality assurance of the academic and administrative activities? If ‘yes’, give details on its operationalization.**

YES

The administration is decentralized and is effectively carried out as per quality policy in line with the suggestions of IQAC.

**6.5.3 Does the institution provide training to its staff for effective implementation of the Quality assurance procedures? If ‘yes’, give details enumerating its impact.**

YES.

Faculties are being deputed to various training programmes related to quality assurance procedures and standards.

**6.5.4 Does the institution undertake Academic Auditor other external review of the academic provisions? If ‘yes’, how are the outcomes used to improve the institutional activities?**

YES.

Academic audit is conducted on the following:

- i) Course files and lab manuals
- ii) Monthly students’ attendance
- iii) Internal Exam Marks
- iv) Semester Internal Marks
- v) Semester and exam marks
- vii) Faculty development programmes and their impact on teaching – learning process.
- viii) Training programmes to students.
- ix) Co-curricular/extra-curricular activities.

**6.5.5 How are the internal quality assurance mechanisms aligned with the requirements of their relevant external quality assurance agencies/regulatory authorities?**

The internal quality assurance mechanisms are designed keeping in the requirements of various accreditation bodies like NAAC, NBA, etc.

**6.5.6 What institutional mechanisms are in place to continuously review the teaching learning process? Give details of its structure, methodologies of operations and outcome?**

The following points are considered for formulating the policies on Teaching- Learning Process

- The internal semester and end semester feedbacks on all the subjects are taken from the students in every semester.
- The student feedback is analyzed and evaluated on the scale of 5 and every teacher is provided with a copy of feedback for making necessary corrections. Further, teachers are counseled by the head of the department and Principal if required.
- Monitoring is also done through class monitoring committees (CMCs) to assess the uniformity in syllabus coverage, and also the quality of teaching.
- Annual review interviews are conducted to evaluate the knowledge and ability of the faculty to teach the curriculum subjects by external experts.
- The quality of course material and assignments prepared by the faculty are assessed internally and suitable suggestions for enriching the course materials and assignments are given by the senior faculty of the departments.
- New/creative assignments are prepared every year in all the subjects.

**Evaluation Procedures & Feedback**

- The evaluation of faculty by the students through feedback forms is done twice in a semester. This feedback is analyzed and appropriate suggestions are given to the faculty by the HoD concerned and the Principal to see that they rectify the shortcomings.
- The student's feedback mainly focuses on the various teaching skills of the faculty members, like presentation, communication, knowledge, content covered, innovative practices and laboratory work.
- Performance and self-appraisals are taken from the faculty and reviewed every year. Based on the evaluation report faculty are counseled.

**Syllabus:**

- JNTUK prescribed syllabus is being followed.
- Extra content shall be given on the skills in demand for employment.

**Academic Calendar:**

- Number of instructional days, contact hours per week to be followed as directed by JNTUK.
- Additional teaching hours for the extra content shall be arranged.

**6.5.7 How does the institution communicate its quality assurance policies, mechanisms and outcomes to the various internal and external stakeholders?**

The institution communicates its quality assurance policies, mechanisms and outcomes through college publications and website.



**CRITERION-VII****INNOVATIONS AND BEST PRACTICES**

The institution in its practices has always been environment friendly and during the last five years, the campus has been highly sensitive to issues like Green Campus, climate change and environmental degeneration. It mainly concentrates on 'Clean Campus- Green Campus'.

**7.1 Environment Consciousness**

MVGR College of Engineering is located in lush green, serene and pollution free environment spread over 43.2 acres of land in Chintalavalasa village situated in the outskirts of Vizianagaram, a fort city in the north coastal region of Andhra Pradesh. Strategic plans of the college for development have always been driven by sustainability of important resources like energy, water, green cover etc.

**7.1.1 Does the Institute conduct a Green Audit of its campus and facilities?****YES.**

The institution is conscious of its responsibilities to the environment and conducts Green Audit of its campus and facilities. The institution maintains a check list of the following in connection with Green Audit:

- Consumption of electricity in the campus; optimum utilization.
- Collection service record for waste materials/condemned equipment.
- Facility information such as number of users and functions.
- Feedback mechanism from facility users.
- Sustainability principles, practices and Environmental Studies are part of Curriculum.
- The administration and management constantly striving to build and develop a natural backdrop that fosters an enabling environment. The NSS unit of the institution suitably complementing the above effort and today MVGR is a campus dotted with more than 2000 trees and innumerable saplings
- As a policy, the institution prohibits the use of the plastics in the campus

**7.1.2 What are the initiatives taken by the college to make the campus eco-friendly?****a) Energy Conservation**

- Institution meters energy segment wise and constantly reviews the same for initiatives for minimizing the consumption.
- Periodic energy audit is being conducted at regular intervals by EEE department and recommendation made for savings
- Periodic inspection and maintenance is carried out for improved performance of electrical systems and reduced loss
- Awareness among the students and staff on energy conservation is created by displays at appropriate places.
- The buildings are fitted with glass windows for maximum utilization of natural light.

**b) Use of Renewable Energy**

- Steps are being taken for the utilization of solar power in the college campus.
  - c) **Water Harvesting**
    - To minimize the wastage of water resources and to improve the ground water level, the rain water is led into the pond located in the campus.
  - d) **Check Dam Construction**
    - At present there is no check dam in the college premises.
  - e) **Efforts for Carbon neutrality**
    - Care is taken to restrict vehicle entry into the campus and specific parking area is allotted for faculty and students.
    - The institute restricted the usage of plastic bags in the campus.
  - f) **Plantation**
    - Plantation programme has been taken up by the NSS unit for increasing the Green Cover in the campus and surrounding villages.
    - The NSS unit regularly conducts awareness programmes on plastic free environment in and around the village.
  - g) **Hazardous Waste Management and e-Waste Management**
    - The condemned batteries are disposed through outside agencies.
- Awareness programmes are initiated on waste management

## 7.2

### Innovations

Though restricted by the limited academic freedom of an affiliated institution, this college has introduced a spectrum of transformative and innovative options during last four years to respond to the complex needs of its stakeholders, as mentioned here under.

#### 7.2.1 Give details of innovations introduced during the last four years which have created a positive impact on the functioning of the college.

##### a) Innovative mechanism/process for internal quality checks

In its quest for excellence, the institution seeks continuous innovation for quality assurance in academic programmes & administration. Some of the mechanisms adopted are:

##### Academic system

- Handouts with lecture plan, assignment questions, useful Uniform Resource Locators (URL) and references are distributed to the students in the beginning of the semester.
- Content Preparation is made available to all the students.
- Close monitoring of course coverage through frequent meetings of HODs with faculty members.
- Class review committee meetings are held once in month.
- Regular monitoring of academic activities through College Academic Committee (CAC).
- Periodic collection of student feedback on individual subject teachers.
- Review of performance of teachers based on feedback and pass percentage of students at university examinations.
- Faculty counselors for every 20 students.
- Remedial classes, bridge courses to make up for weak and slow learners.
- Inviting experienced academia from reputed institutions and

- industry experts for delivering guest lectures.
- Incentives for those carrying out research and publishing papers/participating in Seminars/Conferences.
- Parents are informed about the performance of students after every internal examination. The attendance of students is closely monitored and informed to parents once in a fortnight. Also the performance of the students in the internal examination is communicated to parents. The students are counseled in this regard.

**Administrative system:**

Administrative mechanisms are in place for quality assurances are:

- An exclusive Examination Section headed by Vice Principal (Academics).
- Training and Placement Cell headed by DEAN(T&P) takes care of all the aspects related to placements and training.
- Grievance redress cell to attend to the problems of students.
- There is a centralized research committee with Principal and Dean R & D to review all R & D related activities at departmental and institutional level.
- Maintenance of all buildings and other infrastructure is entrusted to maintenance team under the supervision of DEAN (CI).
- Physical directors attend to all sports activities of boys and girls.
- Technicians in all departments look after the repair and maintenance of lab equipment under the supervision of the teaching staff.
- HOD and senior faculty of each Department look after the teaching and learning process.

**b) Quality assurance for academic programmes****Performance Monitoring**

- Right from the time of admission, performance of every student is carefully monitored. Based on the examination results, faculty counselors take-up counseling of poor performers and try to assess the reasons for their poor performance. HOD's arrange special classes for poor performers.
- Periodic meetings are conducted by the Principal and HODs to review the results of internal and external examinations.
- The analysis of the results of end semester examinations is carried out, and further discussed by HOD with the Principal.
- Teaching staff members guide the students in their projects, monitor their performance and counsel them regarding their performance, apart from regular teaching. Thus, teachers play different roles like project guides, counselors, etc.
- This process ensures the quality of the teaching process.

**Administration**

- Academic & administrative Coordinators and Class teacher in charges closely monitor student performance.

**Student evaluation**

- At college level two online tests and two descriptive tests in a

semester are conducted for internal evaluation. The university conducts the end semester examination.

- Evaluation procedure & guidelines are given to the staff for both theory & practical exams. Corrected answer scripts of internal exam are shown to the students. Students are encouraged to express their doubts. The results are monitored by the HOD.

**Automation of student information**

- Automated information sharing mechanisms implemented by the institution enable close monitoring of student performance as well as attendance and helps in passing on the information to their parents.

**c) Quality assurance for administration**

- The institution is permanently affiliated to JNTUK, Kakinada.
- All eligible UG programmes and MBA are accredited by NBA.
- The college is accredited by NAAC with grade 'A'.
- The departments of CSE, ECE and Mechanical are recognized as Research Centers by JNTUK, Kakinada.
- About 75 % of the faculty are ratified by JNTUK, Kakinada
- Provides opportunities to non-teaching staff to enhance their skills and qualifications.

**d. Innovations in Research and Development and Extension**

- Research committee overviews the R & D activities in the college.
- R & D labs are established in each department.
- Inter-departmental research projects are encouraged.

**e. National Events**

- Several national level events like seminars, workshops are conducted for students and faculty in order to update their knowledge.

**f. Modern ICT Tools**

- For effective teaching-learning process, e-content, modern ICT tools such as LCD projector, etc. are made use of.

**g. Installation of latest configuration computers**

- The systems with old configuration were replaced by the systems with latest configuration. Around 200 systems are of I 3 configured while others core 2 duo

**i. Students' exposure to industries**

- The students go on frequent visits to different industries related to their branch so that they can observe the processes taking place there. This provides greater awareness and clarity on the concepts and techniques they learn in the classrooms.

**j. Group Insurance for Staff-members**

- Group insurance facility is provided to the staff-members of teaching and non-teaching staff.

**7.3 Best Practices:**

**7.3.1 Elaborate on any two best practices which have contributed to the achievement of the Institutional Objectives and/or contributed to the Quality improvement of the core activities of the college.**

Even though the college has quite a number of healthy practices, two of them, “Improving Employability Through Skill Development ” and “Participative Management ” deserve special mention.

### **Best Practice-I**

#### **Title of the Practice**

Improving Employability Through Skill Development

#### **Goal**

In an attempt to bridge the above gaps as well as enhance the employability of its graduates, MVGR College of Engineering has actively been involved in the design and implementation of add-on programs across different engineering streams. The following are the educational objectives and expected outcomes of such add-on programs:

1. To expose students to industry culture and practices
2. To inculcate in students a flair for problem definition and build problem-solving capability
3. To provide hands-on training to students in contemporary industry tools and techniques

#### **The Context**

Despite best efforts at developing a curriculum for industry ready engineering graduates, a targeted and well-established approach towards bridging the gap between the talent pool and the demands of core engineering sectors still needs to be clearly defined. Attempts are being made in pockets to understand the industry need and address the same through add-on programs at the undergraduate level. However, the effectiveness of such programs critically depends upon thorough understanding of industry needs and skill requirements and developing programs, in collaboration with the concerned industry sectors, in order to fill the gap. Educational institutions typically tend to work in isolation with the demands of the industry leading to engineering content delivery being mostly textbook oriented and traditional. Students hardly ever get to understand or be exposed to state-of-the-art developments in their respective fields.

#### **The Practice**

Administering an add-on program requires careful consideration of the engineering curriculum already being delivered, the gaps in the curriculum that need to be plugged to make the student industry-ready and the ability of the administering department to effectively bridge this gap. The following is the procedure adopted by departments in introducing an add-on program to bridge curricular gaps:

- i. Review the academic curriculum and identify gaps in the content
- ii. Define industry sector requirements and identify potential skill development/training programs to augment student capability
- iii. Prepare a clear mapping of the curricular gaps with the proposed skill development program
- iv. Identify available infrastructure with the department and propose additional facilities (if any) required (with budgetary requirements)
- v. Identify faculty competency available in the department (if any) in the proposed area and/or propose faculty skill enhancement plan

(with budgetary requirements)

- vi. Anticipated intake, proposed course fee and viability of the programme

A Detailed Project Report covering the above activities along with the estimated budget, possible demand, proposed course fee and viability for break-even within 5 years is prepared by the department proposing to introduce an add-on program. The report of the department is reviewed by the central administrative team of the college chaired by the Principal. Upon approval of the proposed program, the department proceeds with implementation of the add-on program. The central administrative team is responsible for monitoring the effectiveness of delivery of the add-on programme and in ensuring that the stated objectives and outcomes are met while the departmental program committee, consisting of a team of faculty with relevant training, bears the responsibility for implementation and successful delivery of the program.

The college has put in place suitable add-on programs in collaboration with industry to bridge skill gaps. The course content for these programs are detailed based on discussions with the concerned industry and the individual delivery modules and their contents are finalised. The programs are delivered to the students during their course of study at the undergraduate level typically beginning from the later half of their II year and ending in the first half of their final year of study. By the time they complete their B.Tech program, they also receive certification of completion of these industry-oriented training modules.

### **Evidence of Success**

- Increased student employability as reflected in improved placements
- Increased competency and resulting enhanced delivery from faculty in their teaching learning
- Increased R&D capacity resulting in significant improvement in research proposals
- Substantial growth in Industry- Institution collaboration

As a result:

The college is implementing 8 such add-on programs which are given below:

1. Oracle Certified Java Programmer (OCJP): - This is certified by Oracle Corporation. Over 100 students from the Computer Science and Engineering department have the prestigious OCP certification
2. Creo-2.0:- This is certified by Parametric Technology Corporation. The course was started in 2009 and till date, 160 students have completed the course. Of these, 41 students were placed in various MNCs on the strength of their certification training
3. NI LabVIEW:- NI LabVIEW Academy has been set up in the college by National Instruments Corporation for training on design and deployment of systems for embedded design applications
- 4 Process Equipment Design-SIMTECH
- 5 Technology Learning Center-VLSI-WIPRO Technologies
- 6 SIEMENS –AC Drives

7 New Down Automation-PLCs  
8 Think Labs-Embedded Systems

These and few other such add-on programs currently being administered in the college have given a big edge to the students in enhancing their employability. Many of these students easily get placed on the strength of their skill enhancement.

### **Problems Encountered and Resources Required**

When applied practically, a few gaps exist between the proposed methodology and practical implementation. This is mainly because of the financial constraints as each department is given budgetary allocations exclusively to meet costs of academic services which are curricular in nature. Hence the need for procurement of auxiliary infrastructure to meet the industrial skill needs to be carefully planned and administered properly. To avoid this, measures are taken to anticipate the requirements so that resources can be not only well maintained but also managed to enhance the purpose of skill development.

Apart from this, faculty have to be properly trained to justify the objective of the value added program by being flexible to the changes in the current trend. Should there be lack of pace with the contemporary versions of the technology, an aggregate overview of the package is lost. Faculty with aptitude in the program are therefore sent for training at the respective organizations in advance to be able to handle the training programs.

**Notes(Optional)** Nil

### **Contact Details**

Name of the Principal: Dr. K. V. L. Raju  
Name of the Institution: City: MVGR College of Engineering  
Pin Code: 535005  
Accredited Status: Accredited with 'A' Grade  
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Website: www.mvgrce.edu.in E-mail: principal.mvgr@gmail.com  
Mobile: 9440018656

### **Best Practice-II**

#### **Title of the Practice**

Participative Management

#### **Goal**

- To promote in the faculty a sense of belongingness and responsibility for the overall development of the college through collaborative and participative management, the faculty are oriented and motivated to plan, organise and implement activities related to a specific institutional requirement such as conduct of examinations, purchases, civil and infrastructural development etc.



**The Context**

For the success of any organisation, it is imperative that all its employees feel a sense of belongingness and learn to take responsibility for the effective functioning of the organisation. In most organisations, employees are given a set of responsibilities and expected to execute them to some degree of conformance. They generally do not have much of a say in the overall integration of these responsibilities to the development of the organisation. Only those organisations that are able to motivate their staff to see and take responsibility for the overall functioning of the organisation can go the extra mile in delivering quality output through coordinated and concerted efforts of the staff and not through individual excellence.

**The Practice**

For the overall administration of the institution, there are several requirements that need to be planned and addressed effectively. Generally, the overall responsibility for this lies with the Principal of the college, who, along with a team of administrative staff, attempt to execute the same. This places the entire onus of success of the institution on this team as also the burden of its execution. Moreover, such an approach tends to isolate individual faculty members from the overall institutional challenges for they fail to identify themselves in suitable assistive roles. The practise at MVGR College has been to draw in all its faculty members into different administrative roles so that each and every faculty of the college feel responsible for the overall success of the institution. The faculty are therefore grouped into various committees each headed by a senior faculty member who serves as convenor of the committee. The following are some of the major committees of the college:

1. Examination Cell
2. Purchase Committee
3. Training and Placement Cell
4. Alumni Cell
5. Library Committee
6. R&D Cell
7. Maintenance Committee
8. Disciplinary Committee
9. Grievance Cell
10. College Academic Council
11. E-Services Committee
12. Women Empowerment Cell
13. Cultural Committee
14. Canteen Committee
15. IQAC
16. Magazine Committee

The members of each of these committees are drawn one from each department. The Principal of the college serves ex-officio as chairman of all these committees. The members of each of these committees meet on a regular basis to plan, coordinate and implement various developmental activities under their purview. The challenge faced in such an approach is to bring all faculty involved onto a common platform to be able to appreciate the overall vision of the institution and identify what needs to be done in their respective domains that would enhance the performance



of the institution.

### **Evidence of Success**

The benefits of deep delegation understandably are reflected in the ability of the system in adopting to changes at short notices. Sense of belongingness, pride and a feel of ownership naturally leads to improved social networking and job satisfaction. It is very difficult to quantify the benefits of participative management, if there is one metric, we believe, it is the reputation, rating and recognition the institution is enjoying among its stake holding groups in particular and the society at large. The following are observed to be important outcomes of the model.

- Improved volunteerism
- High levels of team spirit
- Shared vision
- Increased organizational ability
- Shared quality consciousness

### **Problems Encountered and Resources Required**

One of the biggest challenges in this endeavor has been to bring all the faculty on board to equally appreciate the task at hand and deliver effectively. All faculty are part of this effort beginning from the most newly recruited to the senior-most. Significant amount of time is spent in orientation of the faculty to appreciate the challenges on hand. While this may appear to be a limitation, it greatly helps capacity building for the system. Faculty at the junior-most level learn to appreciate the challenges faced in administration. The greatest benefit is that it fosters a sense of belongingness and team-spirit.

### **Notes(Optional)**

#### **Contact Details**

Name of the Principal:	Dr. K. V. L. Raju
Name of the Institution: City:	MVGR College of Engineering,
Pin Code:	535005
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