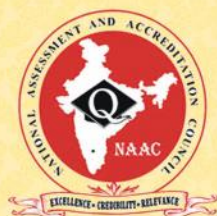*Institutional Accreditation*

SELF STUDY REPORT
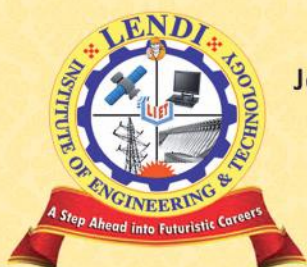
Submitted to

NAAC

NATIONAL ASSESSMENT AND
ACCREDITATION COUNCIL

LENDI INSTITUTE OF ENGINEERING AND TECHNOLOGY

(Approved by AICTE, New Delhi and Affiliated to JNTUK, Kakinada)
Jonnada (Village), Denkada Mandal, Vizianagaram-535005, Andhra Pradesh.
Phone No. : 08922-241111, Fax : 08922-24111
Email : lendi_2008@yahoo.com; siri_venkat@rediffmail.com
www.lendi.org

January, 2017

Institutional Accreditation
Self Study Report

Submitted to

National Assessment and Accreditation Council (NAAC)
P.O Box No: 1075, Nagarabhavi, Bengaluru-560 072

Lendi Institute of Engineering & Technology
(Approved by AICTE, New Delhi and Affiliated to JNTUK, Kakinada)
Jonnada(V), Denkada (M), Vizianagaram–535005, Andhra Pradesh
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January, 2017

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PART - A

PREFACE

Lendi Institute of Engineering & Technology (Lendi) is pleased to present the Self Study Report (SSR) to the National Assessment and Accreditation Council (NAAC).

The Institution was established in 2008 under the aegis of Sai Dhamam Education Trust. The trust promotes educational, social and charitable activities.

The Institution believes in great light which resembles the movement from darkness to light through the power of knowledge. The light drives away the darkness in any of its forms through the education. The Trust has adopted this theme with a vision to produce engineers who can take up challenges in technical, managerial and sociological fields with utmost dedication and innovation.

The Institution is a self-financed engineering institution affiliated to Jawaharlal Nehru Technological University Kakinada (JNTUK). The institute is spread over an area of 13.48 acres and is located at Jonnada, Vizianagaram, Andhra Pradesh. It started as an undergraduate technical institute with four undergraduate programs, viz. Computer Science & Engineering (CSE), Electrical & Electronics Engineering (EEE), Electronics & Communication Engineering (ECE) and Information Technology (IT) in 2008-09. Subsequently, one more undergraduate programme in Mechanical engineering has been introduced in 2012-13. From 2015-16, the Information Technology branch is closed as it was opted least. The Institution started two M.Tech programs, viz Computer Science & Engineering and Embedded Systems and VLSI Design.

Since inception, the institute has consistently taken efforts to establish strong teaching and learning process. This is achieved through well qualified and dedicated faculty and staff. The Institution always has a clear vision that education has to be experiential i.e., student's curiosity should lead to exploration and implementation of ideas. Over the years, the institute has blossomed into an engineering education hub with four undergraduate programs and two postgraduate programs are being most sought after place for a lucrative learning environment.

The institution encouraged faculty to pursue their Ph.Ds at reputed institutes by giving financial assistance and academic leaves to overcome scarcity of faculty having doctoral degrees. This has resulted in cultivating research culture, better quality publications and enhanced teaching learning process.

The spectacular growth in a short period of eight years was possible due to humane view of management towards faculty and staff. Their vision is reflected in creating the best in class Infrastructure and in acquisition of committed Faculty since inception. The faculty has put in efforts

in pursuing Research & Development (R&D) and consultancy activities which have helped them to keep abreast with the latest developments in their respective fields of interest.

The interaction with industry and research institutes has helped to inculcate analytical abilities among the students. This effort has helped students to excel in projects and campus placements.

Glimpse of Achievements:

➢ "Techbus Technologies" a startup company was started by our CSE Student V. Sravan Kumar at Vizag start up village. It is an e-commerce company which delivers all items from tooth paste to Mosquito killers to customers' door steps at less price than market price.

➢ An Android App that helps Engineering Students and faculty to access and use NPTEL lectures on their personnel mobiles was developed by our CSE student S N P Bhardwaj This app was used by more than 1 Lakh users. This app is hosted in google play store and can also accessed through.

https://play.google.com/store/apps/developer?id=Learn+Skills

➢ The examination results have always been way above the average results of the affiliating University JNTUK in the year 2015.

➢ Mr. P.V.N Varma has secured Gold Medal by being University Topper (JNTUK) in Electrical & Electronics Engineering

➢ Quite a few students from various programs of the Lendi Institute have topped the rankers list of JNTUK every year.

➢ The Institution has recorded excellent placements in industries of repute.

➢ Workshops, seminars are organised regularly to give exposure to faculty and students in technological advancements in their field of interest.

➢ Student conferences are organized annually which is a platform for the students to showcase their research work. Faculty and students also regularly attend conferences and workshops outside the Institution which give an opportunity to interact with peer researchers and expose them to advances in technologies. As a result of the institute establishing a strong foot hold in engineering education.

➢ The Institution has recently secured 1st place in the much acclaimed and highly competitive variety educative entertainment competition 'E-PLUS CLUB' an initiative by the Hindu in 2014.

➢ The Institution was awarded 'A' Grade by Govt. of Andhra Pradesh in the year 2015-16, an award from Wipro for partnering with them in contributing to campus placement in year

2016, Aspiring Mind award in 2015, Top 50 Colleges Award by IBM in the year 2013, Tech Mahindra Excellency Award in the year 2013, AA rating through a survey conducted by Career 360 Magazine in 2013 and 'An International Institute' by QAI, UK.

➢ Entrepreneur Development Cell (EDC) plays an important role in introducing the basic concept of entrepreneurship and giving students an opportunity to interact with successful industrialists.

➢ The Institution has always envisioned instilling life skills among the students through their participation in various extra-curricular activities like NSS, intercollegiate sports and cultural competitions, winning several accolades in said programs.

➢ Students are sensitized towards social and environmental issues through NSS activity. The Institution has adopted D. Tallavalasa, a village in Denkada Mandal of Vizianagaram district (near to Lendi campus), drive to build toilets and close interaction with the villagers, Soon after the initiative, D. Tallavalasa's hamlet Akula Peta was declared Open Defecation Free (ODF) village by the Government of Andhra Pradesh.

➢ Two of the students have participated in AP State Level NSS Youth Festival conducted at Adikavi Nannayya University, Rajahmundry during 30-31, January, 2017.

The first step of exploration and implementation, i.e. Student Associations namely, *Dhruva, Lakshya, Taksh* and *Vidhatri* for nurturing the student's all-round ability and for the opportunities to exhibit Technical competency, were started just in the very early months of inception. Along with these association activities, several other technical activities like Code Tantra, CSI2K15, Save-Energy, and other co-curricular to develop communication E-Plus, Cambridge BEC, Quality Assurance International (QAI) GETS HE etc., have grown consistently over the years.

The second step in experiential learning is internships and sponsored projects from industry and Research & Development centers. There are ample opportunities for this, as Visakhapatnam is a growing major hub for education, industrial (core and IT) sectors.

The third step in experiential learning is collaborative work through projects with research institutes. The Institution has collaboration with Code Tantra, Hyderabad, to collaborate and provide opportunities for the students to work with world class research institutions.

The preparation of SSR required the formation of a steering committee comprising of NAAC coordinator, Assisting NAAC coordinator, Heads of all departments and some senior faculty. The steering committee gave directions, conducted critical reviews for the SSR to take its final shape.

The SSR is divided into five parts. These include the preface, executive summary, profile of the institute, criterion wise analytical reports and evaluation reports of four departments. The entire work of preparation of SSR involved tireless work of NAAC Steering committee.

The short term and long term goals of the institution are to obtain autonomy by 2020 and University status by 2025 respectively that will give us academic flexibility to pursue student centric learning driven with the support of industry and society need based projects. The learning process will be supported by R&D, consultancy and social / environment awareness through close collaboration with reputed institutions and industry. This will enable the students to maximize their potential and develop their personality.

PART - B
EXECUTIVE SUMMARY

1. Genesis:

Lendi Institute of Engineering & Technology (Lendi) was established by a divine body of committed intelligentsia of Visakhapatnam to cater to the needs of young graduates of technology. It is just 35kms away from Visakhapatnam; situated at outskirts of city in a serene atmosphere having divine touch of Lendi - a flower garden beside NH-26. Its aim is to create a unique scenario of eligible and elegant engineers to be brought out into the society to compete with and complete the realistic technological needs of India. The Institution is established under the aegis of *SAI DHAMAM EDUCATIONAL TRUST*, Visakhapatnam which was founded with the sacred objective of providing educational opportunities to the ever increasing engineering aspirants. The Institution backed up by the trust, incorporates into the instruction of leadership competencies, citizenship, consciousness, and personality development, moral ethical values that go beyond the curriculum, as the promoting Trust attaches equal importance to integrating human values into education.

The Institution is affiliated to Jawaharlal Nehru Technological University Kakinada, Kakinada. It was established in the year 2008, aims towards, offering quality education to its students, in fulfillment of all the specifications laid down by the AICTE, Govt. of AP and its affiliating University. The Institution with it all attempts are set to welcome the first visit by the NAAC peer Team for its appraisal of this esteemed institution.

2. Vision and Mission:

Vision:

Produce globally competent and quality technocrats with human values for the holistic needs of industry and society.

Mission:

➢ Creating an outstanding infrastructure and platform for enhancement of skills, knowledge and behaviour of students towards employment and higher studies.

➢ Providing a healthy environment for research, development and entrepreneurship, to meet the expectations of industry and society.

➢ Transforming the graduates to contribute to the socio-economic development and welfare of the society through value based education.

3. Current Position:

The Institution is an affiliated engineering institution offering four undergraduate and two post graduate engineering programs.

The Current Annual Intake

Program	Number of Branches	Intake
U.G: B.Tech	4	600
P.G: M.Tech	2	36
The Current Total Annual Intake: - 636		

4. Recognition:

With the vision to achieve excellence in higher education, empowerment through knowledge, inclusive growth for socio-economic change, sustainable development and preparing students for facing global requirements, the Institution attempts to nurture their competence and creativity through innovations in teaching, learning, research and extension activities. The Institution i was approved by the AICTE in the year 2008 affiliated by Jawaharlal Nehru Technological University Kakinada, Kakinada .

5. Geographic Profile:

The Institution is situated on the national highway No: 26 in a rural setting with its verdure and it is well connected with Visakhapatnam International Airport and Vizianagaram & Visakhapatnam Railway Stations. The Institution is located in Jonnada panchayat, a suburb of Vizianagaram and nearby Visakhapatnam. Visakhapatnam is considered as one of the fastest growing cities in Asia and being identified to be developed as SMART City of Andhra Pradesh and one of the popular cities in India having a beautiful Coastal belt, Indian Naval Service, Steel Plant, Port Trust, HPCL Refinery etc,. Two National highways, namely NH- 16 & NH-26, pass through the city making it one of the busiest and most accessible cities in India.

6. Land and built-up space:

The Institution is spread across in 13.48 acres of land, with a built-up area of 14450.25 sq.mts. The Institution has a lot of space available for the academic, research, extracurricular and co curricular work.

7. Placement Record:

The Training & Placement Cell of Institution strives hard in the endeavors of inviting various industries for conducting campus placements. It is one of the satisfying and remarkable facts that the college is able to conduct campus interviews even during the tough situations like Global Recession; Industry's unwillingness to come far off places to conduct Campus Interviews etc.

The following table illustrates the placement record of the Institution during last four academic years.

Batch	No. of Companies Visited	No. of Placements
2013-17	17	103+
2012-16	29	337
2011-15	32	203
2010-14	24	168

8. Seminars, Conferences & Guest Lectures organized:

The Institution always promotes academic improvement through by conducting seminars, conferences, guest lecturers and interaction sessions. These would help to students and faculty. As part of it several academic activities have been organized.

9. Faculty and Students participation in Seminars / Conferences:

In its constant endeavor of academic improvement, the institution is at its forefront in encouraging the Faculty and students to participate in International and National Seminars, Conferences, Workshops. Further, the institution encourages the faculty to participate in Faculty Development Programmes. The Institution provides financial support to students and faculty for participation in Seminars, Conferences and Workshops.

	2016-17	2015-16	2014-15	2013-14
National Workshops	90	84	20	79
International Workshops	-	-	1	-
National Conferences/Seminars	7	5	7	5
International Conferences/Seminars	3	6	6	5

10. Research Publications by the Faculty:

Academic Year	Total Number of Publications in International/ National Journals & Conferences	
	Faculty	Students
2016-17	49	10
2015-16	85	62
2014-15	80	70
2013-14	109	70

11. Central Library:

The Central Library of the institution has with various volumes of books for Engineering, IT, Sciences, Management Sciences, and Humanities. It comprises of Centralized Reading Room, Reference Section, Digital Library, Journal and Periodical Sections and it is having a built-up area of 527 sq.m. It is the seat of research and development for the in-house students and faculty.

The Central Library also has a Career Guidance section which supports in giving information about GATE, GRE, CAT, Civil Services, Personality development, the selection tests of Campus

Recruitments and Banking Service examinations etc. It provides opportunities for the students to fine tune their ability to qualify in competitive examinations.

Information	Data
Seating Capacity	150
No of book titles	2668
Total No. of Volumes	25278
Reference Books	3668
E-Books	183
E-Journals	198(IEEE, ASME)
Print Journals	50
Magazines	17
Back Volumes	705
Project Reports	294
Library Networks Membership	DELNET Facility
E-Learning Material	NPTEL Video Lectures

12. NSS & NCC Activities:

NSS:

NSS Unit was established in 2010 under the supervision of JNTUK with the support of Ministry of HRD, India. The unit has more than 100 volunteer registrations every year. It has been taking an active part in a host of service oriented activities. Various need-based awareness programmes like Disaster Management, Digital Literacy, Usage of Internet, Banking, availing the Welfare Schemes, need of Open Defecation Free (ODF). Blood donation and grouping, AIDS awareness and Cyclone relief operations, Traffic regulation management, Clean and Green are some of the regular activities of the unit.

The Institution received Best NSS Unit award in the year 2012 from the Hon'ble Vice-Chancellor of JNTUK for the organization of Special Service Activity Programmes. The Unit also has received an Award from the Vizianagaram District Collector for the noteworthy contribution to the blood donation activities and certificate of appreciation from Vizianagaram District Revenue authorities for Election Enrolment activities.

NCC:

The Institution has applied for NCC centre to the 13th Andhra Battalion at Visakhapatnam in 2016. It is waiting for the approval of The Commandant Officer of the Battalion to start.

13. Professional Bodies

The Institution strongly believes that any educative activity is successfully fulfilled by the involvement of various professional bodies like Engineers Without Borders (EWB), Institute of Engineers (India) (IEI), Institute of Electronics and Telecommunication Engineering (IETE),

Computer Society of India (CSI). These bodies offer a lucrative environment for real time practical exposure to the students in the field of their interest.

14. ALUMNI:

Our Alumni are from the reputed employed in MNCs like Infosys, Wipro, TCS, IBM, Tech Mahindra, Accenture, Polaris etc. The Alumnae to extend the help to the students of the institution in addition to their efforts in making themselves stronger in their chosen field, for placement and industrial training. They also act as a bridge between institution-industry to promote R&D activities, training, development and consultancy.

LAA - Lendi Alumni Association, a registered society, keen on for awarding Scholarships to the needy and deserving students. The LAA extends every possible help to the institution authorities for overall progress of the institution by organizing programmes on personality development, mock interview technique and leadership development, education in health science, yoga, literature, and sports etc.

15. EXTRA AND CO-CURRICULAR ACTIVITIES:

To bring out the hidden talents of students, various literary activities like Debates, Group Discussions, Quiz, Essay writing, Elocution and cultural activities like Mimicry, Short Film making, Extempore, Mock show, Singing & Dancing, Skits, etc., are conducted on a regular basis. Fresher's Day, Annual Day, Department Association Day, Various Cultural Activities Competitions, Sports Day and Farewell are major events conducted. The Institution gives an opportunity to case their talent.

The Institution has established an excellent air conditioned auditorium having 500 seating capacity with all the required audio and visual facilities.

16. THE SWOC ANALYSIS OF THE INSTITUTION

The Institution has conducted the SWOC analysis for developing a comprehensive picture of its position and prospects. The following explains in detailed:

STRENGTHS:

- Positive mindset of Management and academic team towards quality education, accreditation & excellence.
- Effective Teaching Learning Process
- Strong Learning Resources and well equipped Library.
- Excellent Infrastructure and Ambience conducive for Quality Education.

- Dedicated and energetic Staff and good number of faculty having Ph.Ds
- Encouragement for faculty to pursue Ph.D.
- Motivational incentives for faculty and students.
- Strong research aptitude and Substantial R & D Grants from college Management
- Significant Consultancy and Testing Services
- Extra focus on Students' Communication & Personality Development.

WEAKNESSESS:

- Financial restraints due to constrained fees of un – aided private Engineering colleges to the state – of – art facilities for PG and R & D.
- MOUs with industries and Consultancy are limited.
- Sponsored R & D activities to be strengthened.
- Business Incubators in collaboration with local industries.
- Limited Collaboration with premier research.

OPPORTUNITIES:

- Wide range of upcoming new specialized research areas / technologies.
- An improved research environment can be foreseen as large number of faculty is pursuing Ph.D.
- Wide scope for collaboration with Indian and foreign research institutes/ universities / organizations.
- Strong alumni base with persons working in industries, Government and abroad willing to extend support.
- Industry institute interaction
- Lot of scope for Faculty Development

CONSTRAINTS

- Input quality of students.
- Volatile economic situation
- Industry-Academia gap through rapid development in technology.

To
The Director,
National Assessment & Accreditation Council,
Bangalore.

Sir,

    Sub: Submission of Self-Study Report (SSR) to NAAC for accreditation Cycle 1 –Lendi Institute of Engineering & Technology, Jonnada, Vizianagaram-535005- Reg.

    Ref: Our Institution Track ID: **APCOGN26930** vide LOI Dt. 7.2.2017.

<p align="center">***</p>

With reference to the subject and reference cited above, I am herewith submitting five sets of hard copies and a soft copy (CD) of SSR along with a DD worth Rs. 3,45,000 (Three Lakh Forty Five Thousand Rupees only) towards Assessment and Accreditation (A&A) fee bearing No:_____ dated _____ drawn bank _____ and branch_____.

I request you to kindly arrange the visit on the following dates

        Set1: 31st March, 1st and 2nd April, 2017.
        Set2: 7th, 8th and 9th April, 2017.
        Set3: 21st, 22nd and 23rd April, 2017.

Hence I request you to kindly permit us to proceed further.

Thanking you

                                    Yours Sincerely,

Date: 15-02-2017.   **Dr. V.V. Rama Reddy**
                                      Principal

Enclosures:
1. Five sets of hard copies and one soft copy (CD) of SSR
2. DD of Rs 3,45,000 DD No
3. AICTE approval letter
4. JNTUK affiliation letter
5. LOI Acceptance letter

PART – C:

Profile of the Affiliated College

1. Name and Address of the College:

Name	Lendi Institute of Engineering and Technology
Address	Via 5th Battalion, Jonnada Village, Denkada Mandal. Vizianagaram
City & State	Vizianagaram, Andhra Pradesh, Pin: 535005
Website	www.lendi.org

2. For Communication:

Designation	Name	Telephone With STD Code	Mobile	Fax	Email
Principal	Dr. V.V. Rama Reddy	08922-241111	9490304747	08922-241112	lendi_2008@yahoo.com
Vice Principal	Dr. M. Rajan Babu	08922-241111	9492618186	08922-241112	mrajanbabu@gmail.com
Steering Committee Coordinator	Mr. K.V. Narasimham	08922-241111	9866278504	08922-241112	narasimham_kv@yahoo.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. It is a recognized minority institution?

Yes	
No	√

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

NA

6. Sources of funding:

Government	
Grant-in-aid	
Self-financing	√
Any other	

7. a. Date of establishment of the college: **29/06/2008** (dd/mm/yyyy)

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

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY KAKINADA (JNTUK), Kakinada, Andhra Pradesh

c. Details of UGC recognition: (Enclose the Certificate of recognition u/s 2 (f) and12 (B) of the UGC Act)

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

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 (dd-mm-yyyy)	Validity	Remarks
AICTE	**B.Tech :ECE-180**	05-Apr-2016	1 Year	F.No. South-Central/1-2813237299 /2016/EOA
	B.Tech :CSE- 180	05-Apr-2016	1 Year	
	B.Tech : EEE- 120	05-Apr-2016	1 Year	
	B.Tech : ME-120	05-Apr-2016	1 Year	
	M.Tech :ECE- 18	05-Apr-2016	1 Year	
	M.Tech : CSE - 18	05-Apr-2016	1 Year	

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) - NA

   b. for it performance by any other governmental agency?

Yes | √ | No |

If yes, Name of the agency **APSCHE** and Date of recognition 2015-16(dd/mm/yyyy)

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

Location*	Rural
Campus area	**54551.61** sq.mts. (13.48 acres)
Built up area	**14450.25** sq.mts.

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

11. **Facilities available on the campus (Tick the available facility and provide numbers or other details at appropriate places) or incase the institute has an agreement with other agencies in using any of the listed facilities provide information on the facilities covered under the agreement.**

S.No	Facilities	Available
1	**Auditorium/Seminar complex with infrastructural facilities**	√
2	**Sports facilities:**	
	a. Play ground	√
	b. Swimming pool	
	c. Gymnasium	√
3	Hostel	
	(a) Boys' hostel	
	i. Number of hostels	
	ii. Number of in mates	

	iii Facilities (mention available facilities)		
	(b) Girls' hostel		√
	i. Number of hostels :		01
	ii. Number of in mates :		67
	iii. Facilities (mention available facilities) Facilitate specious rooms with five beds per room and provide Fans, lights, safe lockers, chairs, tables & TV , Newspapers , magazines , indoor games, sports as well as hygienic food.		√
	(c) Working women's hostel		
	i. Number of in mates		
	ii. Facilities (mention available facilities)		
4	Residential facilities for teaching and non-teaching staff (give numbers available —cadre wise)		
5	Cafeteria		√
6	Health centre–		√
	First aid, Inpatient, Outpatient, Emergency care facility, Ambulance…….		
	Health centre staff–		

	Qualified doctor	Full-Time		Part-Time	√
	Qualified Nurse	Full-Time	√	Part-Time	

7	Facilities like ~~banking, post office,~~ book shops	√
8	Transport facilities to cater to the needs of students and staff	√
9	Animal house	
10	Biological waste disposal	
11	Generator or other facility for management/regulation of electricity and voltage	√
12	Solid waste management facility	√
13	Waste water management	√
14	Water harvesting	√

12. Details of programmes offered by the college (Give data for current academic year) : 2016-17

S.No	Program Level	Name of the Program / Course	Duration (Years)	Entry Qualification	Medium of Instruction	Sanctioned / approved student Strength	No. of students admitted
Undergraduate Programs – B. Tech							
1	Undergraduate	Computer Science & Engineering	4	Intermediate	English	180	180
2	Undergraduate	Electrical & Electronics Engineering	4	Intermediate	English	120	104

3	Undergraduate	Electronics & Communication Engineering	4	Intermediate	English	180	179
4	Undergraduate	Mechanical Engineering	4	Intermediate	English	120	117
`**Postgraduate Programs – M. Tech**							
1	Postgraduate	Computer Science & Engineering	2	B. E / B. Tech	English	18	Nil
2	Postgraduate	Electronics & Communication Engineering	2	B. E / B. Tech	English	18	02

13. Does the college offer self-financed Programmes?

Yes √   No

If Yes, how many?   UG: 4 & PG: 2

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

Yes √   No

If Yes, how many?   2

15. List the departments:(respond if applicable only and do not list facilities like Library, Physical Educational 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.)

Not Applicable

16. Number of Programmes offered under (Programme means a degree course like BA, BSc, MA, M.Com…)

a. **Annual System**
b. **Semester System**   **All Programs**
c. **Trimester System**

Number of Programmes with

a. Choice Based Credit System   : NIL

b. Inter/Multi disciplinary Approach   : NIL

c. Another (specifies and provide details)   : NIL

17. 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** | |

18. 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** | |

19. 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 Recruited	12	2	23	11	61	49	60	17	18	1
Yet to recruit	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

*M-Male   *F-Female

20. Qualifications of the teaching staff:

Highest Qualification	Professor		Associate Professor		Assistant Professor		Total
	Male	Female	Male	Female	Male	Female	
Permanent teachers - 158 (M- 96, F-62)							
Ph.D.	10	2	-	4	-	-	16
Ph.D (Pursuing)	2	-	8	5	7	4	26
M.Phil.	-	-	1	-	1	-	02
PG	-	-	14	2	53	45	114
Temporary teachers							NIL
Part-time teachers							NIL

21. Number of Visiting Faculty/Guest Faculty engaged with the College. NIL

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

Categories	2016-17		2015-16		2014-15		2013-14	
	Male	Female	Male	Female	Male	Female	Male	Female
SC	18	05	10	04	08	02	07	02
ST	00	00	04	01	01	00	01	00
OBC	209	136	218	165	188	107	175	95
General	114	95	95	77	106	90	94	69
Others	03	00	04	01	04	02	01	00
TOTAL	344	236	331	248	307	201	278	166

23. Details on students enrollment in the college during the current academic year:

Type of students	UG	PG	M.Phil	Ph.D.	Total
Students from the same state where the college is located	576	02	NA	NA	578
Students from other states of India	04	0	NA	NA	04
NRI students	0	0	NA	NA	0
Foreign students	NA	NA	NA	NA	NA
Total	**580**	**02**	**NA**	**NA**	**582**

24. Drop out retain UG and PG (average of the last two batches)

UG   NIL   PG   NIL

25. Unit Cost of Education

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

(a) including the salary component   Rs.43,561

(b) excluding the salary component   Rs.19,588

26. Does the college offer any programmes 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. - NA

c. Number of programmes offered - NA
d. Programmes carry the recognition of the Distance Education Council. - NA

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

Program	Course	Faculty : Student Ration
B. Tech	Computer Sciences Engineering (CSE)	1:15
B. Tech	Electrical and Electronics Engineering (EEE)	1:15
B. Tech	Electronics and Communication Engineering (ECE)	1:15
B. Tech	Mechanical Engineering (Mech)	1:15
M.Tech	CSE - Computer Science and Engineering	1:12
M.Tech	ECE – Embedded Systems and VLSI Design	1:12

28. Is the college applying for

Accreditation: Cycle1 [√] Cycle2 [ ] Cycle3 [ ] Cycle4 [ ]

Re-Assessment: [ ]

(Cycle1 refers to first accreditation and Cycle2, Cycle3 and Cycle4 refers to re-accreditation)

29. Date of accreditation*(applicable for Cycle2,Cycle3,Cycle4andre-assessment only) - NA

Cycle1:………………(dd/mm/yyyy) Accreditation Outcome/Result………...

Cycle2: ………………(dd/mm/yyyy) Accreditation Outcome/Result………...

Cycle3:……………… (dd/mm/yyyy) Accreditation Outcome/Result………...

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

30. Number of working days during the last academic year.

| 261 |

31. Number of teaching days during the last academic year

(Teaching days means days on which lectures were engaged excluding the examination days)

| 179 |

32. Date of establishment of Internal Quality Assurance Cell (IQAC) IQAC 01/07/2016 (dd/mm/yyyy)

33. Details regarding submission of Annual Quality Assurance Reports(AQAR) to NAAC.

AQAR (i)   ………………(dd/mm/yyyy)

AQAR (ii)   ………………(dd/mm/yyyy)

AQAR (iii)……………… (dd/mm/yyyy)

AQAR (iv) ……………… (dd/mm/yyyy)

34. Any other relevant data (not covered above)the college would like to include. (Do not include explanatory/ descriptive information). Nil

PART - D
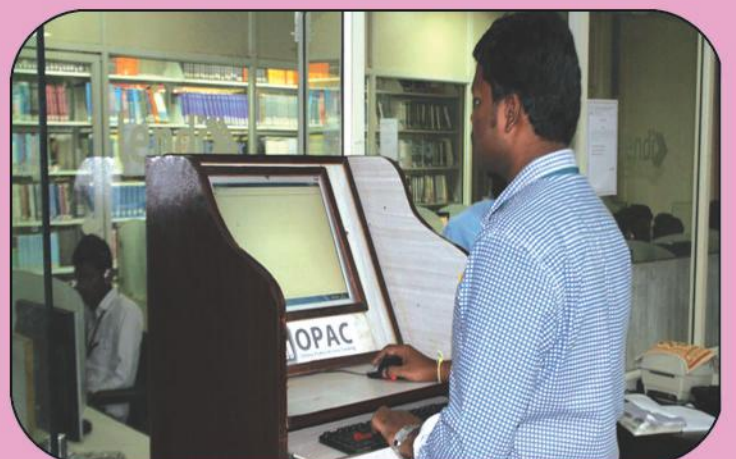
CRITERION 1 to 7

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:

Produce globally competent and quality technocrats with human values for the holistic needs of industry and society.

Mission::

➢ Creating an outstanding infrastructure and platform for enhancement of skills, knowledge and behaviour of students towards employment and higher studies.

➢ Providing a healthy environment for research, development and entrepreneurship, to meet the expectations of industry and society.

➢ Transforming the graduates to contribute to the socio-economic development and welfare of the society through value based education.

Objectives:

➢ The graduates will have strong knowledge, skills and attitude towards employment, higher studies and research.

➢ Graduates shall comprehend latest tools and techniques to analyse, design and develop novel systems and products for real life applications.

➢ Graduates shall have multidisciplinary approach, professional attitude, ethics, good communication, team work, lively hood life and engage in life-long learning to adopt the rapidly changing technologies.

Communication to Stakeholders:

The Vision, Mission and objectives of the institution are

➢ Displayed in the College campus at Notice boards, Department Notice boards, Canteen, Hostel building, library and other prime locations to engross the attention of all students, faculty, staff and visitors.

➢ Communicated through college website and Newsletter to all the stakeholders for wide publicity.

➢ Conveyed through HR meets, parents meets, orientation programs and Faculty development programs for all stakeholders' awareness.

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 Institution Academic Committee conducts the meeting to discuss on various plans and jobs for effective implementation of the curriculum before commencement of the academic year.

➢ The Department Academic Committee along with the Head of the department conducts meetings and monitors the plan of action at regular intervals for rigorous implementation of the curriculum and academic calendars.

➢ Subjects are allocated to the faculty on the basis of their expertise. Course outcomes and program outcomes are discussed thoroughly with the department program committee.

➢ All faculty members conscientiously prepare their course files for each subject and Lab Manuals that are suitable for emerging technologies in the field.

➢ The structure of course file is given as:

Part1: Vision and Mission of the Institute & Department, Program Educational Objectives (PEOs), Program Outcomes (Pos) and Program Specific Outcomes (PSOs) Statements, Course Syllabus, Course Information Sheet, Course Outcomes – Assessment Methodology/Plan Sheet, Model Lesson Plan, Lecture notes (Unit-wise), Brief Study materials, OHP/LCD Sheets/CDs, University Previous years Question Papers, Internal Question Papers with key, Assignment Topics, Tutorial Sheets, Unit wise-Question Bank, Gaps & Plans for Add-on programs, Topics beyond Syllabus-References.

Part 2: Lesson Plan, Time Table, Teacher Log Book/ Attendance Register, Daily Delivery Recording, Continuous Evaluation-Marks (Tests, Assignments etc), Sample Answer Sheets (of Test Papers), Sample Assignment Sheets, Record of Tutorial Classes, Record of Remedial Classes, Makeup Classes/Tests, Guest Lecturers Conducted, Details of Add-on Programs, Result Analysis, Remedial/Corrective Action, Course Outcomes Assessment & Steps initiated towards Continuous Quality Improvement (CQI).

➢ Faculty members execute the academic plan and the curriculum with innovative techniques, workshops, seminars and industrial visits.

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?

➢ The Institution always encourages the faculty members to attend the various faculty development programs on new technologies in the syllabus which are conducted in reputed Universities and institutes.

➢ The departments conduct assorted workshops / faculty development programs on latest and emerging topics.

➢ The Institution supports faculty to participate in the workshops, conferences and seminars with financial assistance.

➢ The Institution has been continuously sustaining for the empowerment of faculty.

➢ The advanced research laboratories are established in the college with latest equipment and software.

➢ The Institution library procures various books & research journals for strengthening the curriculum and its effective delivery by the faculty members.

➢ It's a regular practice at the institution to conduct the guest lectures by eminent academicians and Industry personnel for promoting research activities and enriching skill development by incorporating research aspects to urge the delivery of curriculum of the 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 Institution designs practically adoptable academic calendar for execution of curriculum delivery and transaction with the gaps of topics beyond curriculum to build a bridge between industry and institute.

➢ All laboratories in the institute are well-resourced and equipped. The Institution premeditated laboratory experiments along with additional experiments to get practical exposure in the subjects.

➢ On each subject the student seminars are incorporated in the time table itself, to inculcate the soft skills for the career benefit of the students.

➢ The Institution concentrates on slow learners by conducting remedial classes for improvement in their learning skills.

- ➢ The Institution provides NPTEL Video Lectures to all faculty and students for enhancement of their knowledge in the subject.
- ➢ The Institution supports the students through industrial visits for industrial collaboration, internships and practical experience.
- ➢ The Institution also organizes group discussions, technical fests, technical quiz, expert lectures and workshops on latest technologies to share the knowledge.

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

Industry:

- ➢ The Departmental Academic Committees interact with industry for MOUs, in-plant training, internships and workshops/lectures for effective transfer of technical knowledge on the latest developments in the industry.

Research Bodies:

- ➢ The Research & Development cell interacts with research bodies to obtain support for academic projects, information for attending the various national and international conferences, seminars and workshops.
- ➢ The student chapters and faculty members are interacting with the research bodies like CSI, IEI, IEEE, IETE, and EWB for obtaining the research grants to promote research activities in the departments.

University:

- ➢ The Department Academic Committee interacts with University authorities and Professors for inviting guest lecturers, updation of new technologies, changes in the curriculum, and research collaboration.

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, stake holder feedback provided, specific suggestions etc.

- ➢ The Institution collects the suggestions and feedback on curriculum from the students and other stakeholders and forward these suggestions to the respective board of studies of the University for Indispensable Actions on inclusion in the curriculum.

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.

Being it is affiliated to JNTUK, the college has no autonomy to design its own curriculum but the college introduces a few innovative academic programmes in the curriculum to strengthen the technical knowledge and need based skill-set of the students. A few of such initiatives are:

i. **Smart Class Room** initiative to inculcate the habit of "learn-by-doing" concept among the students.

ii. Additional content is designed in a few subjects wherever necessary to bridge the gaps in the curriculum.

iii. Special lectures are arranged by external experts on the latest ongoing topics beyond the curriculum.

iv. Certificate courses are introduced on current technologies and soft skills.

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

➢ The outcome based education is rigorously implemented in the institute that ensures the effective achievement of objectives of the curriculum.

➢ Lesson plans, remedial classes for slow learners, group discussions to encourage the recap of ideas are effectively implemented for achieving the objectives of curriculum.

➢ The outcomes of the examinations are evaluated and deliberated plans are instigated to improve the results of the course outcomes.

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

▪ Collecting feedback from students on course outcomes, faculty and content delivery.

▪ Collecting Exit feedback from outgoing students on the curriculum and its implementation.

- Collecting 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.

The institution has been offering several training and certification programmes to students to cater to the needs of the industry and self development. A few such programmes are:

i. **Embedded Systems Training:**

Goal: Students are able to do hardware project activities

Objective: To enhance hardware skills and micro controller programming skills.

ii. **MATLAB:**

Goal: Students are able to apply, verify, analyse and regulate desired specifications of Electrical power and industrial design.

Objective: Students should be able to simulate the real time projects and be able to write the programming of real industrial applications using MATLAB.

iii. **Non Destructive Testing (NDT):**

Goal: This is aimed to provide the practical exposure to the students with regard to the various non destructive testing techniques.

Objective: Students are exposed to the concepts of various NDT techniques using radiography, ultrasonic, liquid penetrates and magnetic particle tests.

iv. **Automobile Engineering:**

Goal: This is aimed to provide the practical exposure to the students with regard to the automobile systems and service features.

Objective: This imparts the principles of automobile systems and provides features of service of automobiles.

v. **Cambridge Business English Certificate (BEC) & Qualifications Assessments International (QAI) Global English Testing Service in Higher Education (GETS HE), UK:**

Goal: Obtaining the Fluency Certificates for Global higher education.

Objective: For developing communication competency in English language communication skills

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

NO, the institute does not offer such programmes.

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

Range of Core/Elective options offered by the University and those opted by the institution:

> ➢ The institute offers various elective courses giving flexibility for the students to opt their electives in their respective department for skill development, academic mobility, progression to higher studies and improvement of potentiality for employability. These elective courses bring awareness among students about the future needs of the industry, research, advancements in the technologies and employability.
>
> ➢ Flexibility is provided in the time table for library, internet, additional skill development programs and certification programs.

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.

All the programs offered by the college are self-financed only.

S. No	Item	Description
1	Programmes	**UG**: B.Tech Courses ECE, CSE, EEE, and ME with sanctioned in take as per G.O.Rt.No.120, Higher Education (ME) Dept. dated 30-05-2016. **PG**: M.Tech Courses Embedded systems and VLSI Desin, CSE with sanctioned in take as per AICTE and AP Govt approval.
2	Admissions	**UG:** 70% Admissions are carried under convener quota as per G.O.Ms.No.74,75, Higher

		Education (EC) Dept. dated 28-07-2011 based on merit in Common Test (EAMCET) and 30% of the seats are allotted under management quota based on the merit of Intermediate examination. **PG:** ICET/PGCET
3	Curriculum	The curriculum is designed by the Jawaharlal Nehru Technological University Kakinada, and it is effectively planned for implementation.
4	Fee Structure	As fixed by Admissions and Fee Regulatory Committee (AFRC), Government of Andhra Pradesh wide G.O. Ms.No. 39, Higher Education (EC) Dept. dated 24-06-2016.
5	Teacher's Qualifications	**As per A.I.CT.E Norms:** Post Graduation / Ph.D in Engineering & Technology, Sciences, Humanities and Management.
6	Salary	**As per A.I.CT.E Norms:** Assistant Professor:Rs.15600 – 39100 + AGP 6000 Asst. Professor: Rs.15600 – 39100 + AGP 7000 Associate Professor: 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.

The institute conducts lectures by experts from various universities and industries to enhance the Employability skills of the students. Various programmes are introduced to improve the additional skills. They are Project Exhibitions, Industrial Visits, Personality development programmes, Technical training programmes, Aptitude & Reasoning classes, Group Discussions, Behaviour grooming sessions, Soft Skills and Communication skills practice. These training programmes are benefitting the students for getting regional and global employment opportunities.

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, the University does not provide such flexibility.

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?

Following are the supplement efforts in the Curriculum made by the institution to achieve the institution's goals and objectives.

➢ Bridge courses are being initiated by faculty members to fulfill the gaps in the curriculum.

➢ Additional experiments were deliberated in laboratories beyond University prescribed experiments

➢ Various academic initiatives, educational tours, Industrial visits and NSS activities are organized to develop quality technocrats with human values for the holistic needs of industry.

1.3.2 What are the efforts made by the institution to enrich and organize the curriculum to enhance the experiences of the students so as to cope with the needs of the dynamic employment market?

➢ The institute trains the students based on the requirements of the industry, by imparting required skills which are essential for the dynamic employment market.

➢ The training and placement cell of the college organizes special training programmes like life skill development, verbal and logical reasoning, orientation programmes, interactive sessions with Industrial experts and other on demand programmes on a regular basis.

➢ The institution enhances the student skills by allowing them to do mini projects which are applicable to the real time scenario. They are also encouraged to do projects in industries.

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 puts its sincere attempts through the following initiatives to integrate the need based cross cutting issues into the curriculum:

➢ Institute provides friendly environment to anti-ragging. An anti-ragging committee monitors to curb the menace.

➢ A grievance cell that works open for the Students grievances.

- NSS unit organizes programmes like blood donation camp, Swachh Bharat, Plantation, clean and green, quality testing of drinking water, medical camps to make the students aware on the cutting edge social issues.

- A Woman grievance cell named *Femina Wing* is established in the college to look into the problems of girl students.

- Students Disciplinary Committee governs with its framed rules and regulations works for the balanced academic environment among their peer groups

- Co-curricular activities such as paper presentations, organization of paper presentation contests, group discussions and technical quiz programmes are conducted.

- Subjects on Environmental Studies and Morals & Ethics are introduced in the curriculum designed by the University 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.

- Various awareness programs are organized on social stigmas, disaster management, road safety and health issues.

- Awareness workshops are conducted on human rights, climate change and gender equivalence.

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

- **Moral and ethical values**
  - The subjects "Professional Ethics and Human Values" and "Intellectual Property Rights and Patents" in curriculum are handled by experienced faculty to inculcate the morals and ethical values.
  - Personality development lectures are delivered by renowned persons to instill moral and ethical values among students.

- **Employable and life skills**
  - The institute gives importance to the students in organizing the co-curricular activities to develop interpersonal and decision making skills.
  - Several programmes on employability skills are conducted right from the second year level to improve the technical & soft skills of the students.

- Teachers day, Engineers day are celebrated by students to showcase the importance of teacher-student relationship and the role of engineers in nation building.

➢ **Better career options**

- To enhance the capability of solving engineering problems using ICT, courses on computer languages and applications are introduced in the curriculum.
- To enhance employability skills of the students Training & Placement Cell interacts continuously with employers and identifies the new areas of knowledge in demand and new career options available.

➢ **Community orientation**

- The Institution NSS team regularly organizes social camps in surrounding areas and nearby villages to create awareness among the public community on various social, moral, ethical principles and ways of life.
- NSS unit of the college has adopted nearby villages Jonnada, Duvvupeta and D. Tallavalasa since 2010 and conducted various camps in these villages to have community education through service for the student's personality development.

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

➢ The exit feedback is taken on curriculum and training programmes. The views of the students on curriculum are well received and the relevant suggestions are communicated to the affiliating university.

➢ The feedback of the students on training programmes is taken and accordingly improvements are made in these programmes wherever necessary.

➢ Employers' opinion is also taken to know the capability of our students on their assigned job in the industry and brought out the changes in the training programme consistently to suit the requirements of the industry.

➢ Based on the feedback taken from Alumni Department introduces the need based projects that enriches the students skill set suitable to the requirements of Industry.

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

Monitoring Mechanism

➢ The training and placement cell conducts practice tests on their training programmes to assess the effectiveness of training.

➢ Feedback is taken on all quality enrichment programmes and suitable modifications are made wherever necessary.

Evaluation Mechanism

➢ 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 of various methodologies followed in training programmes.

➢ Departmental Programme Committee evaluates the quality of enrichment programmes besides curriculum.

➢ The Institution Academic Committee evaluates the quality of the teaching and supports the teachers through various faculty development programmes consistently for further motivation.

1.4 Feedback System

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

➢ The Institution communicates the suggestions made by its stake holders on the design and development of the curriculum to board of studies of the university whenever change occurs in the curriculum.

➢ The Institution encourages the faculty members to attend workshops and seminars on revision of curriculum and offers their suggestions to enrich the curriculum.

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

➢ Feedbacks are obtained from the outgoing students on curriculum and worthy suggestions are communicated to the University for Curriculum Enrichment.

- The feedback is also used internally to enrich the content to fill the gaps found in the curriculum.
- Student Counseling Committee obtains 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.
- Parents' meets are regularly conducted to invite their suggestions on curriculum and the training offered by the institute. The suggestions of parents are incorporated in enriching the curriculum.
- 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 Institution introduced two Post Graduate programs i.e., M.Tech in Embedded Systems & VLSI Design and M.Tech in Computer Science & Engineering in the year 2014.

CRITERION II: TEACHING-LEARNING AND EVALUATION

2.1 Student Enrollment and Profile

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

The Institution follows the guidelines given by Andhra Pradesh State Council of Higher Education (APSCHE), Government of Andhra Pradesh in the admission process.

The promotion is to create awareness about the institute and its academic activities achieved through the following ways:

Advertisement in Regional / National Dailies:

➢ The Institution gives advertisements in news papers and displayed on college website for publicity about the college, admission notifications for B-Category seats and spot admissions in B.Tech and M.Tech courses. The admissions under B-category seats are made according to the guidelines of APSCHE.

Awareness Programs:

➢ The Institution firmly believes that students and parents are its best ambassadors hence awareness and induction programmes are conducted for parents and students on the system of education and the process of admissions into the college.

Brochure & Handbook:

➢ The Institution publishes brochure and handbook that highlights the vision, mission and objectives of the college, code of conduct, university regulations, courses offered, details of the teaching staff, library, sports and games, state of art laboratories and other infrastructural facilities. The Institution also publishes annual newsletter.

Transparency and Meritocracy:

➢ In the process of ensuing transparency, the college has a regularly updated website that provides all information about the college.

➢ The availability of seats in various reservation categories, fee payable, Rules and regulations of APSCHE relating to eligibility and the admission procedures and the list of selected candidates along with their rank and selection criteria for all the programmes are also placed on 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.**

➢ AP State Council of Higher Education (APSCHE) conducts common entrance test AP-EAMCET for admission into UG Engineering programs and AP- PGECET for admission into PG Engineering Programs. As per norms laid down by the Govt. of AP and APSCHE, 70% students (A-Category – Convener quota) of UG and PG programmes are admitted through centralized admissions process based on the merit in common entrance test. The remaining 30% students (B-category - Management/NRI quota) are admitted by the institution. In the second year of UG Program, additional 20% of the sanctioned intake is admitted through AP-ECET as lateral entry.

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

i) A-Category admissions:

➢ Entry into 1ˢᵗ year B.Tech is based on rank secured in common entrance test i.e., APEAMCET

➢ Entry into 2ⁿᵈ year B. Tech (Lateral Entry) is based on rank secured in APECET

➢ Entry into M.Tech programs is based on rank secured in GATE / PGECET

ii) B-Category admissions:

B-Category seats are filled with eligible candidates on merit basis following eligibility criteria laid down in rule (4) of G.O.Ms.No.74, Higher Education (EC) Dept. dated 28-07-2011.

2016-17

		BEST RANK				LAST RANK			
		CSE	EEE	ECE	ME	CSE	EEE	ECE	ME
OC	Boys	13155	32426	19350	17105	78470	123615	70896	99514
	Girls	14629	24546	12479	8099	56230	115252	64017	119956
SC	Boys	101299	--	117917	59732	130721	--	120320	131628
	Girls	92445	--	85521	--	122648	--	--	--
ST	Boys	--	--	--	--	--	--	--	--
	Girls	--	--	--	--	--	--	--	--
BC-A	Boys	77900	57173	30783	48144	117796	71090	114657	104300
	Girls	44719	--	53523	--	136910	--	100328	--
BC-B	Boys	31238	65691	56988	22251	86995	127870	58960	132554
	Girls	16117	30299	22326	--	87286	89498	103646	--
BC-C	Boys	--	--	--	--	--	--	--	--
	Girls	128847	--	--	--	--	--	--	--
BC-D	Boys	20843	26450	15800	12356	87595	104219	82679	133360
	Girls	15875	44200	18725	40381	91111	123147	101402	109571
BC-E	Boys	123792	--	98312	--	--	--	--	--
	Girls	127616	--	--	--	--	--	--	--
CAP /NCC/ SPT/PH	Boys	CAP-78470	NCC-61954	CAP-57505 NCC-62134	--	--	--	--	--
	Girls	NCC-47838	--	CAP-62723	--	--	--	--	--

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?

➢ The process of admissions is totally under the control of the APSCHE, Government of Andhra Pradesh. So, admission process cannot be reviewed by institute under the A-Category admission.

➢ For B-Category admissions, based on the newspaper advertisement and notification displayed on the college website, applications are received. The order of merit list is prepared after applications are scrutinized by admission review committee. These admissions are ratified by APSCHE.

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/Economically Weaker Sections: The admission procedure for SC/ST/OBC/EWS students is as per the reservation policy of the State Government. To increase the admission of the above mentioned categories, Book bank facility is provided for SC/ST students, Fee reimbursement is given by the state government to the SC/ST/OBC/ EWS students. For Economically Weaker Sections, the college is giving financial assistance.

Women: 33% of the admitted students in convener quota are women as per reservation policy of the state government. In-house Ladies Hostel facility under the supervision of female faculty is provided. A woman grievance cell named *Femina Wing* is constituted being headed by one senior woman staff member, along with one woman faculty member from each department and a few girl students as members, looks after the welfare of girl students and women staff members.

The number of girl students admitted during the last four years is given below:

Program	Course	2016-2017	2015-2016	2014-2015	2013-2014
B.Tech	CSE, EEE, ECE, ME	236	248	201	166
M.Tech	Embedded and VLSI Design	2	4	4	NA
M.Tech	Computer Science & Engineering	0	0	4	NA
Percentage		38.63%	40.97%	38.42%	37.38%

- ➢ **Differently abled:** Seats are allotted to differently abled students as per the reservation policy of the state government. For them, Lift (elevator) facility is provided with ramps with railings connected to ground floor.

- ➢ **Minority community:** Reservation is available to the minority community as per the state government's policies.

- ➢ **Any other:** Sports and NCC candidates are given reservation as per state government's guidelines.

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.**

Under Graduate Programs (UG)

S.No	Academic Year	Course	Students Intake	Students Admitted	Demand Ratio
1		Computer Science and Engineering	180	180	100
2		Electrical & Electronics Engineering	120	104	86.66
3	2016-17	Electronics & Communication Engineering	180	179	99.44
4		Mechanical Engineering	120	117	97.5
1		Computer Science and Engineering	180	177	98.33
2		Electrical & Electronics Engineering	120	112	93.33
3	2015-16	Electronics &Communication Engineering	180	173	96.11
4		Mechanical Engineering	120	117	97.5
1		Computer Science and Engineering	180	158	87.77
2		Electrical & Electronics Engineering	120	74	61.66
3	2014-15	Electronics &Communication Engineering	180	159	88.33
4		Mechanical Engineering	120	117	97.5
1		Computer Science and Engineering	120	96	80
2		Electrical & Electronics Engineering	120	110	91.66
3	2013-14	Electronics &Communication Engineering	120	119	99.16
4		Mechanical Engineering	120	119	99.16

Post Graduate Programs (PG)

S.No	Academic Year	Course	Students Intake	Students Admitted	Demand Ratio
1	2016-17	VLSI & Embedded Systems	18	02	11.11
1	2015-16	VLSI & Embedded Systems	18	08	44.44
1	2014-15	VLSI & Embedded Systems	18	10	55.55
2		Computer Science and Engineering	18	6	33.33

There is no much inconsistency found in UG admissions but in PG there found a decrease because of the trend of students interest in jobs instead of higher education. To increase the admissions in PG our Placement Cell is interacting with the industry to give internships during their course of study.

2.2 Catering to Student Diversity

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

The institution has been practicing good number of policies to meet the needs of differently abled students:

➢ Admissions are made by the AP state Govt. allotting a certain percentage of reservation according to the degree of disablement.

➢ Ramps with railings are provided to reach the elevator facility at ground floor for differently abled students.

➢ During examinations, the scribe facility is given on application by the student, following the rules of the Govt. / university.

➢ Additional time is allotted for such categories in the examinations, as per University norms.

➢ Assistance is given for their movement by providing wheel chair. Separate seating arrangement is made in class rooms for easy mobility.

➢ Continuous motivation and monitoring of such type of students for their better performance.

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 following are some of the identified needs to the Students:

➢ The institution identifies the fresher's knowledge in subjects like, Mathematics, Physics, Chemistry and English etc., through oral discussions in the orientation program. The students are given special orientation to enable them to cope up with the engineering syllabus in the course they have chosen.

➢ Special classes are taken to the identified students to improve the concepts needed for engineering.

➢ Special classes are arranged on personality development, grooming and communication skills.

➢ Orientation classes are conducted for lateral entry students on Mathematics and Computers before commencement of the class work.

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:

➢ Remedial classes are undertaken for identified slow learners.

➢ Bridge course on PCB design is conducted by Department of Electronics and Communications Engineering and C-Programming for Lateral entry students

➢ A practical web platform Code Tantra is given to improve the programming skills and logical ability of students.

➢ An add-on courses on

1. Embedded systems to enhance the hardware skills.

2. MATLAB to improve technical Knowledge in Simulation.

3. Auto CAD certification course to improve their drafting skills.

4. Data Structures Lab using C programming for improving programming skills of II year Department of Electronics and Communications Engineering students.

5. English Communication Practice (ECP) to improve English proficiency of the students to bridge the gap between Industry & Institution.

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

The Institution conducts Seminars and Conferences on the importance of gender sensitization, environmental and ecological balance.

Gender:

➢ A woman grievance cell *Femina Wing* redresses the grievances of women employees and girl students.

➢ Awareness programs are conducted to girl students related to health, hygiene and confidence building.

Inclusion:

➢ The Institution provides equal opportunities to staff & students in curricular, extracurricular activities, deputation to workshops and seminars, in appointment of various college committees.

Environment

➢ Lush green filled campus provides eco-friendly environment.

- Various competitions are conducted on environmental issues.
- The students also involve in social service activities like Swachh Bharat Programme, Plantation, Health Check-up Camps, Blood Donation Camps, Fire Safety measures programs in which the faculty and students participate equally.

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

The Institution has a mechanism in which the advanced learners are identified based on the following:

- Students' enthusiasm, passion towards the advancements in the field of study are observed during academic interaction with faculty is also taken into consideration to identify them as advanced learners.

Encouraging Initiatives for advanced learners:

- The advanced learners are encouraged to take up the certificate courses.
- Allowing them to exhibit talent of innovation, advanced Technical Skills in latest technologies on the platform *Engineers without Borders* a global body that works for innovation.
- Encouraging the Students to take the choice based Projects and promoting them to present papers in conferences/journals.
- Institute established Entrepreneurship Development Cell to encourage the advanced learners to become an Entrepreneur.
- Teachers in the institution deliver additional topics beyond syllabus to enrich the knowledge of the students in advanced topics.
- Institute provides additional facilities like Wi-Fi internet, digital resources.

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. who may discontinue their studies if some sort of support is not provided)?**

Collection of the students' personal information:

- Once the student is admitted, his/her previous academic performance, family's socio-economic background, strengths and weaknesses, goals etc., are collected through student counseling file and analyzed throughout his/her program.

Analysis of the students' personal information:

➢ Based on the collected data through college counseling process, the institute finds the students who may be at risk of dropping out.

➢ Internal motivation is carried out by the institution that helps students to overcome the risk of dropping out.

➢ A teacher of the same discipline adopts some students and act as mentor to monitor continuously progress of these students.

➢ Teacher-mentors analyze the reasons for chances of dropouts and motivate them to continue the program.

➢ Further they are channelized to Counseling club of College where the psychologists professionally counsel them to come out of the problem of dropping out from the program.

Support to the students at risk of Dropping out:

1. **Slow learners:**

   ➢ The Institution conducts special classes for the slow learners.

   ➢ Teacher prepares specially designed notes and distributes it for slow learners to understand the subject easily.

   ➢ An awareness is created to parents about remedial actions

2. **Physically challenged:**

   ➢ The Institution creates the awareness to the physically challenged students with the facilities available and scholarships offered by the government and other organizations

   ➢ The Institution also identifies inherent skills in the physically challenged and motivates to excel in related areas.

3. **Economically weaker section:**

   ➢ Awareness about the financial assistance by Government and other organizations is created among them.

   ➢ The Institution also provides financial assistance.

4. **Disadvantaged section of society:**

   ➢ Special coaching is offered to the disadvantaged sections of students and books are provided at free of cost.

2.3 Teaching-Learning Process

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

A course file is prepared by every faculty for every course and it is meticulously supervised by the Program Committee well in advance before the commencement of the course work. The following is the structure of a course file:

Part 1: Vision and Mission of the Institute & Department, PEO, PO/PSO Statements, Course Syllabus, Course Information Sheet, Course Outcomes – Assessment Methodology/Plan Sheet, Model Lesson Plan, Lecture notes (Unit-wise), Brief Study materials, OHP/LCD Sheets/CDs, University Question Papers, Internal Question Papers with key, Assignment Topics, Tutorial Sheets, Unit wise-Question Bank, Gaps & Plans for Add-on programs, Topics beyond Syllabus-References.

Part 2: Lesson Plan, Time Table, Teacher Log Book/ Attendance Register, Daily Delivery Recording, Continuous Evaluation-Marks (Tests, Assignments etc), Sample Answer Sheets (of Test Papers), Sample Assignment Sheets, Record of Tutorial Classes, Record of Remedial Classes, Makeup Classes/Tests, Guest Lecturers Conducted, Details of Add-on Programs, Result Analysis, Remedial/Corrective Action, Course Outcomes Assessment & Steps initiated towards CQI.

i) Academic Calendar

➢ The Institution level academic calendar is prepared keeping in view of the University academic calendar, includes different activities to be organized by the institution that provides perfect balance between academic and other activities.

➢ It is included in the student handout and also placed on the college website.

ii) Teaching Plan

Every Faculty prepares a teaching plan with a student centric teaching methods. The following are the methods observed in due course of this planning

➢ By using Revised Bloom's Taxonomy, the Course Outcomes and objectives are carefully defined keeping in view of Programme Outcomes (POs) and Programme Specific Outcomes (PSOs) to attain Programme Educational Objectives (PEOs) and Vision and Mission of the Department.

➢ Lecture schedule of each course is prepared according to university academic calendar.

- Plan for Add-on Programs to fill the identified Gaps and topics beyond Syllabus.

- Unit –wise Lecture notes and brief Study materials, Assignment Questions, Tutorial Sheets are prepared.

- Laboratory manuals are prepared and supplied to students at the beginning of the semester.

- NPTEL Videos and other e-resources are extensively used for effective teaching.

- Handouts are given to each student in the beginning of every semester. The handout consists of Lecture schedule, Course objectives and course outcomes of each unit, Text books, Reference books and URLs of corresponding courseware and NPTEL videos along with subject material, Assignments and Question bank for each unit, Previous Question Papers, Content beyond syllabus etc

- Plans to take Feedback from students for continuous quality improvement (CQI).

iii) Evaluation Blue Print

- Question Papers as per Revised Bloom's Taxonomy are set keeping in view of Course Outcomes (COs).

- The department will carry out internal assessment like unit wise assignments on all subjects.

- Day to Day Evaluation is followed in Lab Sessions.

- A semester-end external examinations are conducted on credit point based evaluation and Evaluation of projects is made as per the norms of the University.

- Seminars and Mini Projects are also considered for evaluation.

- Surveys and Exit Interviews are considered for evaluation of Programme Outcomes

- The evaluation of each course is based on assignments, internal & external examinations of each Theory and Lab.

- Results of all assessments are evaluated to know the attainment of Course Outcomes for quality improvement

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

The IQAC contributes the following:
- Formulates quality parameters for various academic activities like workshops, seminars, guest lectures, invited talks etc.,

- Advising the faculty to take up challenges in upcoming technologies or advancements in the field to improve the quality in teaching process helpful to have the lucrative learning environment.
- Continuously monitors the quality of teaching learning process based on the feedback from all stakeholders and suggests the remedial actions for further improvement.
- Encourages both faculty and students to perform best practices like doing online courses (webinars, NPTEL etc.,) and certification courses for promoting quality.

2.3.3 How is learning 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?

- Principal motivates the faculty on collaborative and innovative teaching learning process regularly.
- The institution conducts Faculty Development Programmes on various modern teaching methods.

Interactive learning:

- Faculty encourages students participating in interactive discussions during the lectures.
- Providing seminar hours as part of the regular time table for the knowledge sharing among the students
- The Institution encourages conducting seminars, workshops, group discussions and various student centric events to make learning interactive.
- The Institution encourages the students to participate in various events conducted by IITs, NITs, other institutions and industries of repute in offering an opportunity to have an interaction with quality peers.

Collaborative learning

- Each class is divided into a few groups of students who motivate themselves to have combined study among them.
- These groups are also motivated to take up group-wise challenging assignments.
- Inter Departmental Projects are encouraged in Curriculum to offer an opportunity to collaborate with peers of other branches.

- Various Project Expos are conducted on platforms like *Engineers without Borders* (EWB), CSI, IEI and IETE student chapters to have competitions collaboratively.

Independent learning

- Encouraging students to take up independent learning for taking up challenges in programming on *Code Tantra*, a web platform.
- Institute encourages the students and faculty to join Online Courses on the platforms like NPTEL, Coursera and edX to enhance the spirit of learning on advanced concepts.
- E-Journals, NPTEL Videos and other resources are made readily available for the access during Library and Internet hours given in the Time Table to inculcate the habit of self learning among students.

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?

Critical Thinking:

- The institution encourages the students to participate in the project competitions conducted by IITs, NITs and the Institutions of repute to offer conducive environment for critical thinking.
- The faculty members raise the questions in assignments which are used to enhance their critical thinking and creative thinking.

Creativity:

- Automation software for Library, College Website design, App designs, Innovative Projects made by students are some of the examples of challenges undertaken by the students for exhibiting their critical and creative thinking to transform them as lifelong learner and innovators.

Scientific Temper:

- The faculty encourages students to design their own applications using the available equipment in the laboratory and software.
- Faculty members create healthy environment among the students to exchange their scientific temper.
- The scientific thinking among students is enhanced by providing additional laboratory hours and research activities.
- 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.
- To sharpen narrow 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 E-learning Resources.**

- Virtual labs (http://vlab.co.in/) in physics, other sciences and engineering subjects are used to enthuse students to conduct experiments by arousing their curiosity.
- Multimedia animated lectures and Prototype models are used to teach the various subjects like ED, Machine design etc., for effective interpretation and understanding of the content.
- Providing e-resources for effective teaching learning process

NPTEL

- 5000 hours of 12604 NPTEL video lectures prepared by IIT subject experts on 129 subjects are subscribed and available in the digital library for students and faculty's access.

E-Resources

- Department wise Learning materials, E-Books: 1728, E-journals, Previous Question Papers, Project Reports are made available in the Central Library.
- The e-contents of the web: http://mhrd.gov.in/e-contents is extensively used in the regular teaching learning process.

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 Institution encourages the students and faculty members to participate in short-term courses, staff development programme, workshops, symposiums on advanced topics to enrich their level of knowledge.
- The Institution allows the faculty and students to visit the industry and work for some time on real time projects and internship programs.
- 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 presentation contest, poster presentation, technical exhibition etc. under departmental association activities.

➢ The Institution conducted national level symposium in collaboration with CSI chapter, Visakhapatnam.

➢ A National level symposium *Renewable Energy* is conducted in association with Engineers without Borders (EWB)

➢ The Institution allows faculty and students to participate in webinars and MOOCs programs.

➢ The Institution provides massive video lectures to enhance the advanced knowledge and skills of students and faculty.

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

➢ Counselors are allotted for each class or group of students to provide academic, personal & career guidance.

➢ The Counselors give need based guidance and carefully monitor the performance and gradual development in the personality of the students and most of them are benefited.

➢ The Institution provides interaction with eminent academicians for their guidance in improving student academics.

➢ Regular motivational lectures by professional psychologists such as Swamy Gunesananda, Sri Gampa Nageswararao, Sri Yandamoori Virendranath, Dr.B.V. Pattabhiram etc., are conducted for the stress management and acquisition of life skills among all students.

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?

➢ *By the student, to the student and for the student*, an innovative practice coined as *SMART Class Concept* with the support of faculty is yielding fruitful results.

- Task Based Language Learning (TBLL) is practiced for the improvement in English language communication skills
- Student Seminars are planned and an hour provided in the Time Table for review of covered concepts.
- Outcome Based Education concept is practiced in the teaching learning process.
- The college encourages the faculty to visit various IITs and NITs, to identify the best practices made by these institutes and carry out those practices in our college.
- Videos of student activities at English Language Communication Skills (ELCS) lab are uploaded to YouTube to improve the sought after communication skills which also gets the likes and comments from their peers and reviewers.
- Faculty encourages the students to use web based platform Code Tantra for improving their problem analysis and programming skills.
- Each department has well equipped e-class room.

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

The library has the following resources.

Item	Description
Seating Capacity	**150**
Titles	**2668**
Total No. of Books	**25278**
Reference Books	**3668**
e-Books	**183**
e-Journals	**198 (IEEE,ASME)**
Book Bank for SC/ST	**369**
Print journals	**50**
Back volumes	**705**
Magazines	**17**
Project Reports	**294**
Computers with multimedia and internet facility.	**25 Mbps**

- Library hour is included in the Timetable to enhance the usage of Library and it works beyond the working hours and days. The students are encouraged to utilize the learning materials available in the library.
- Library Networks Membership: DELNET Facility.

- The faculty and students use the video lectures like NPTEL, NME-ICT etc.,
- The faculty and students refer the online and print journals for updating their knowledge.
- An awareness seminar on "*How to use library resources effectively*" is usually conducted every year by the college librarian for newly admitted students.

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

YES, Due to unexpected interruptions like strike calls, Natural calamity, local festivals the disturbed class work is compensated by extra classes beyond working hours.

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

- 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.
- The Head of the Department (HOD), Class Teacher and Students form a Class-level Quality Circle and discuss syllabus coverage, quality of delivery; quality of tutorial etc., periodically then HOD discusses the syllabus coverage with respective faculty members.
- The inter semester and end semester feedbacks on all the subjects are taken from the students in every semester to evaluate the quality of teaching learning.
- Based on the result analysis, the quality of teaching is also evaluated and necessary suggestions are made by IQAC for improvement.

2.4 Teacher Quality

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

Recruitment and Retention Policies:

- The faculty members are recruited as per guidelines and norms of AICTE, UGC and University.

- The Institution recruits the faculty members by giving advertisement in career opportunities column of national level newspapers and also the institution website for having a choice to attract highly qualified, competent and diversified faculty.
- Institution gets ready to offer Pay Packages in demand to deserving candidates for recruitment and retention of qualified and competent faculty.
- To retain faculty, Institute provides academic leaves for pursuing their Ph.D. work, Medical Leaves, Group Medical Insurance and Employment Provident Fund (EPF).

The Details of Faculty

Department	Highest Qualification	Professors		Associate Professors		Assistant Professor		Total
		Male	Female	Male	Female	Male	Female	
Computer Science &Engg.	Ph.D	1	1	-	-	-	-	02
	Ph.D (Pursuing)	1	-	2	1	1	-	05
	ME/M. TECH	-	-	6	2	9	14	31
	M.C.A	-	-	2	-	-	-	02
Electronics & Communication Engg.	Ph. D	3	-	-	-	-	-	03
	Ph.D (Pursuing)	-	-	3	1	1	1	06
	ME/M. TECH	-	-	5	-	9	12	26
Electrical & Electronics Engg.	Ph. D	1	-	-	-	-	-	01
	Ph.D (Pursuing)	-	-	3	-	1	1	05
	ME/M. TECH	-	-	-	-	13	6	19
Mechanical Engg.	Ph. D	2	-	-	-	-	-	02
	Ph.D (Pursuing)	-	-	-	3	-	-	03
	ME/M. TECH	-	-	1	-	17	1	19
Science & Humanities	Ph. D	3	1	-	4	-	-	8
	Ph.D (Pursuing)	1	-	-	-	4	2	07
	M.Phil.,	-	-	1	-	1	-	02
	M.Sc.,/M.B.A/M.Com.,/M.A.	-	-	-	-	5	12	17

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, Bio-informatics etc.)? Provide details on the efforts made by the institution in this direction and the outcome during the last three years.

For emerging new technologies namely R-Programming, Python, Cloud Computing, VLSI, MATLAB Simulink, IOT etc., the Institute undertakes the training with experts through workshops & FDPs and encourage to take Online Courses on these technologies to upgrade themselves.

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.**

Institution is always at the forefront to provide the opportunity to its Faculty attending faculty development programmes for enhancement of the quality in teaching and exchange their knowledge. For attending to these programmes, the required financial assistance and on duty facility is provided. The following are the details of such programmes attended by the faculty during the last four years.

Academic Staff Development Programs	2016-17	2015-16	2014-15	2013-14
A)Refresher Courses attended	33	18	4	21
B)Staff training conducted by University	-	-	1	-
C)Staff training conducted by other Institutions	1	1	-	-
D)Seminars &Workshops participated	32	56	19	44
E)Paper Presented in Conference / Seminars	12	7	7	5

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.)**

Incentives and financial support

➢ An incentive of Rs. 25,000 is given to the faculty who acquired Ph.D after joining the Institute.

➢ Rs. 5,000 is awarded for paper publications in reputed journals having significant impact factor with the affiliation of the Institution.

➢ After acquisition of Ph.D the faculty is promoted to next higher designation. Otherwise, two Additional increments are given upon award of Ph D if the faculty is not eligible for higher designation.

➢ The Institute grants paid study leave to pursue higher studies or Ph.D. programme as per the need.

➢ The institution extends full support for the professional development by deputing its faculty to attend refresher courses, orientation Programs, and training programs organized by universities and research organizations.

- Financial assistance is given to faculty for attending/presenting papers in conferences, seminars and workshops.

- R&D Labs are established and required fund is allocated time to time for encouraging in-house research.

- The Institution also conducts number of seminars, workshops and invited guest lectures for the faculty professional recharge.

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 Institute provides necessary infrastructure and other required support to encourage teachers to excel in their teaching / research. An environment conducive for academic growth is developed among teachers to prove their mettle.

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 on presentation, communication, knowledge, content covered, innovative practices and laboratory work is done twice in a semester and it is analyzed and appropriate suggestions are given to the faculty by the concerned.

- Self-appraisals are taken from the faculty at the end of every academic year and their performance is evaluated, if necessary the suggestions are made.

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?**

- Syllabus books and Regulations of the University along with Academic Calendar of the college are provided to both faculty and students.

- The institution creates awareness about evaluation process to the students and faculty, even to the parents of the students.

- The rules and norms issued by the affiliated university are promptly displayed on the notice boards and also circulated to the students.

- The students are informed at the starting of session regarding internal examination and evaluation process, eligibility criteria for appearing in final exam.

- The marks obtained in the internal exam, monthly attendance are displayed in the notice board, sent to each student for his/her acknowledgement. Further, on a need base, parents are also informed by post.

- The meetings are conducted regularly with the staff on review of evaluation process for necessary improvements.

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 has adopted various university reforms pertaining to evaluation are as following:

- **Internal Assessment**: Internal marks are awarded to the students as per the university criteria and the college adopted day to day evaluation of each subject by conducting model examinations and viva voce in labs.

- **On-line (Quiz) Evaluation:** On-line objective type examinations are conducted by the university along with institute conducts mock online exams.

- **Set system in Question Papers**: University gives Four Sets of question papers in its examinations. An awareness is made among the students and faculty on this set pattern of question papers

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

The Institute ensures all evaluation policies of University are followed in spirit. After setting of question papers, they are submitted to exam cell in sealed covers confidentially to ensure transparency in the system. Internal examinations are conducted as per the university examination pattern.

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

- Institution adopts both summative and formative methods of evaluation by providing separate booklet for each student in their mid examinations and

assignments for making the student knowing his/her overall performance at a glance.

- ➢ An Assignment on a Unit is given formatively to assess the required course outcome of the unit.

- ➢ A summative Midterm exam is conducted at the end of three/four units as per university regulation to assess the course outcomes of those units. Formative and summative assessments are also conducted on laboratories and Projects.

- ➢ Students' performance is managed through EZ-School software system to have an open access for faculty, students and the parents for ready reference.

2.5.5 **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.)**

- ➢ Internal assessment and evaluation is carried out transparently and the results are updated to university as per the University directions and all the students are aware of the transparency.

- ➢ To ensure overall development of the student, institution takes care of personality development and communication skills.

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

The Institution follows Graduate Attributes [Programme Outcomes (POs)] specified by National Board of Accreditation (NBA) and every department has its own Program Specific Outcomes (PSOs) to acquire competence to practice at the appropriate attainment level. The attainments of POs & PSOs are ensured through rigorous academic activity, discipline and based on students' assessment tests on each and every course.

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

Rederessal mechanism at institution level:

- ➢ The internal evaluated answer scripts are made available to ensure their satisfaction of results.

- The Institute allows the students to verify their answer scripts and to have a facility of revaluation on any grievance.

Rederessal mechanism at University level:

- University level grievances are forwarded to university through examination section of the institute and get resolved by the university.
- Recounting, Revaluation and Challenging evaluation are available for University end examinations.

2.6 Student performance and Learning Outcomes

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

YES. The college has clearly stated learning outcomes.

- All faculty actively take part in designing the best learning outcomes of their courses to fulfill the requirements of POs, PSOs and PEOs of each Programme under the supervision of Programme Committee.
- Learning Outcomes are displayed on classroom notice boards and circulated among the students as handbooks. In addition to it, the Subject Course Files and Lab Manuals are displayed on the college website.

2.6.2 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.

- Class tests, assignments are conducted regularly for every unit to evaluate performance of the student and the corresponding progress is tracked.
- The class teacher monitors, tracks and supports the students in their performance during the programme.
- By conducting and organizing academic project reviews, workshops and technical events, institution also analyzes the student achievement during the programme.
- A report of results is given to students for their parents' attention and the same is informed over phone to the parents. As a result of this method of communication student progress has shown positive results.

An Analysis of the Students' Results for the last four years.

Batch	Branch	Over All Pass %	Number of First Division	Number of Second Division
UG				
2012-2016	CSE	85.3	83	10
	ECE	91.2	112	03
	EEE	84.0	98	02
	ME	83	103	05
2011-2015	CSE	94.0	91	03
	ECE	90.2	113	07
	EEE	95.4	119	06
2010-2014	CSE	90.8	84	15
	ECE	84.5	108	12
	EEE	93.3	101	12

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

Teaching Strategies:

➢ Course file is prepared well in the advance of each semester that includes course outcomes, lesson plan, assignments, previous year question papers and lecture notes used for effective teaching and learning process.

➢ Academic calendar of University and college is strictly followed to achieve the intended learning outcomes.

➢ Latest methods and techniques based on ICT along with black board are used to deliver the lecture by enabling students to interact and participate in the hourly discussions.

➢ NPTEL lectures, MHRD e-contents and various e-resources are extensively used to supplement regular teaching learning process.

➢ Hours for Placement Training, Library, Games & Sports, Internet, Counseling are included in the class Time Table.

➢ Live project and case studies oriented teaching.

➢ Teaching through industrial visits for real time exposure.

Learning Strategies:

➢ Progressive and effective learning environment for each student.

➢ Slow learners and advance learners are identified and given remedial classes and special assignment respectively.

- Assignments and tutorial classes are effectively conducted to inculcate the habit of students self study.
- Providing study materials and e-resources for the students to adorn them with new learning abilities.
- Soft skills and core technical training are provided to students for career opportunities.
- Academic Project through research publications is entrusted to students to enhance research ideas.

Assessment Strategies:

The Institution adopts two Assessment strategies classified as Direct and Indirect assessment.

- **Direct Assessment:** Performance evaluation through internal and external examinations in theory and lab, tutorials and assignments, project work and seminars.

- **Indirect Assessment:** Performance evaluation through Survey of Alumni, Exit Feedback and Employer Feedback

2.6.4 What are the measures/initiatives taken up by the institution to enhance the social and economic relevance (student placements, entrepreneurship, innovation and research aptitude developed among students etc.) of the courses offered?

Student placements:

- Training the students with new technologies to meet the needs of corporate company by bridging the gap between Institution and MNC's.

- To grab the opportunities through campus interviews, the need based training on aptitude, verbal and nonverbal, soft skills etc., is extensively offered.

Entrepreneurship:

- An Entrepreneurship Development Cell (EDC) that works on creating awareness on the importance of entrepreneurship. It conducts periodically various workshops and invited talks to motivate the students to be future entrepreneurs.

- Motivating the students to take up the challenges in establishing Startups through interaction arranged with successful entrepreneurs.

Innovation and research aptitude

- The Institution established R&D Labs to instigate the spirit of research and innovation among the students.

- ➢ Conducting awareness programs and workshops by eminent Scientists from Research Laboratories, Professors from IITs and NITs etc.,
- ➢ Conducting Internal Project competitions for innovative practices of research.

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

Institution gathers data from students to enhance the organization attributes and in turn analyze for quality assessment from the below steps.

- ➢ Feedbacks gathered from the final year students to improve the institution growth.
- ➢ Collective Feedbacks from Alumni members to enrich the organizational stature.
- ➢ Gathering Feedbacks from Post Graduate students to improvise the institution research and development strategies.

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

Programme committee monitors the attainment of the course out comes and map it with programme outcomes through direct and indirect assessments.

2.6.7 Does the institution and individual teacher use assessment/ evaluation outcomes 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. Any other relevant information regarding Teaching-Learning and Evaluation which the college would like to include.

Yes. The student performance and achievement is evaluated and assessed based on the framed outcomes.

Program Outcomes:

Program Outcomes (POs) 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 POs is exemplars of the attributes expected of a graduate from an institution.

The Program Outcomes are:

PO	Description
PO1 `	**Engineering Knowledge**: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
PO2	**Problem Analysis**: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
PO3	**Design/development of Solutions**: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations
PO4	**Conduct Investigations of Complex Problems**: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
PO5	**Modern Tool Usage**: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.
PO6	**The Engineer and Society**: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
PO7	**Environment and Sustainability**: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
PO8	**Ethics**: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
PO9	**Individual and Team Work**: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
PO10	**Communication**: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
PO11	**Project Management and Finance**: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
PO12	**Life-Long Learning**: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

The programs outcomes are developed to attain and meet the program educational objectives and Program Specific Outcomes (PSOs). Program Educational Objectives (PEOs) are formulated as given below based on the Stake holder's feedback.

Department of Computer Science & Engineering

	Program Educational Objectives (PEOs)
PEO1	Graduates will have strong knowledge and skills to comprehend latest tools and techniques of Computer Engineering so that they can analyze, design and create computing products and solutions for real life problems.
PEO2	Graduates shall have multidisciplinary approach, professional attitude and ethics, communication and teamwork skills, and an ability to relate and solve social issues through computer engineering.
PEO3	Graduates will engage in life-long learning and professional development to adapt to rapidly changing technology.
	Program Specific Outcomes (PSOs)
PSO1	Ability to grasp advanced programming techniques to solve contemporary issues.
PSO2	Have knowledge and expertise to analyze data and networks using latest tools and technologies.
PSO3	Qualify in national and international competitive examinations for successful higher studies and employment.

Department of Electrical & Electronics Engineering

	Program Educational Objectives (PEOs)
PEO1	Graduates shall have strong foundation in core and allied Electrical and Electronics Engineering, in sciences and mathematics, to become globally competent in designing, modelling and critical problem solving.
PEO2	Graduates shall involve in research activities in the field of electrical and electronics engineering through lifelong learning and provide solutions to engineering problems for sustainable development of society.
PEO3	Graduates shall have good communication skills and socio-ethical values for getting employment or higher studies by excelling in competitive examinations and be able to work in supportive and leadership roles.
	Program Specific Outcomes (PSOs)
PSO1	Capable of design, develop, test, verify and implement electrical and electronics engineering systems and products.
PSO2	Succeed in national and international competitive examinations for successful higher studies and employment.

Department of Electronics & Communication Engineering

	Program Educational Objectives (PEOs)
PEO1	Graduates will have strong knowledge, skills and attitudes towards employment, higher studies and research.
PEO2	Graduates shall comprehend latest tools and techniques to analyze, design and develop novel systems and products to solve real life problems.
PEO3	Graduates shall have multidisciplinary approach, professional attitude, ethical values, good communication, teamwork and engage in life-long learning to adapt the rapidly changing technologies.
	Program Specific Outcomes (PSOs)
PSO1	Capable of design, develop, test, verify and implement analog and digital electronics and communication engineering systems and products.
PSO2	Qualify in national and international competitive examinations for successful higher studies and employment.

Department of Mechanical Engineering

	Program Educational Objectives (PEOs)
PEO1	Graduates will have strong knowledge, skills and attitudes towards employment, higher studies and research.
PEO2	Graduates shall comprehend latest tools and techniques to analyze, design and develop novel systems and products for real life problems.
PEO3	Graduates shall have multidisciplinary approach, professional attitude, ethics, good communication, teamwork and engage in life-long learning to adapt the rapidly changing technologies.
	Program Specific Outcomes (PSOs)
PSO1	Capable of design, develop and implement sustainable mechanical and environmental systems.
PSO2	Qualify in national and international competitive examinations for successful higher studies and employment.

**Prof. R. Marshall,
Plymouth University, USA**

**Expert Lecture
Prof. D.V.L.N. Somayajulu, NIT-W**

**Personality Development Programme,
Gampa Nageswara Rao**

**FDP Programme,
Prof. NVS N Sharma, NIT Warangal**

QAI International Institution Award

Swacch Bharat

CRITERIA-III: RESEARCH, CONSULTANCY AND EXTENSION

3.1 Promotion of Research

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

Not yet, the institution will be eligible for recognition of Research Centre after NAAC accreditation.

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 (R& D) Cell comprised of the following members.

Designation	Member
Chairman	Dr. V. V. Rama Reddy, Principal
Coordinator	Dr. G.R.S. Murthy, Professor, CSE
Members	1. Dr. P. Satheesh, Professor, ME 2. Dr. B.Sridhar, Professor, ECE 3. Dr. M.Anupama, Assoc Professor, S&H 4. Mr. B.T.Rama Krishna, Assoc Professor, EEE

Recommendations of R&D Cell:

➢ Setting up of new equipment for advanced research in the R&D laboratories.

➢ Encourage faculty to submit proposals for various research projects.

➢ Creating awareness among the students and faculty for effective utilization of the R&D Labs.

➢ Organizing technical workshops, Faculty and Student centered training programs catering to the technological needs of engineering fraternity.

➢ Invite to collaboration through guest lectures by eminent personalities from industry and academia.

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

Facilities to Principal Investigator

➢ Principal investigators can avail academic leaves for attending various workshops, conferences, short term training programmes and various research labs at premier institutes as and when required.

➢ Release of resources for carrying out the proposed project/research work whenever required.

➢ Adequate infrastructure, human resources, various online journals, reference books and hand books are made readily available.

➢ Privileges like reduced teaching load, special leave are provided in order to carry on the research/project work smoothly.

➢ Encourage to present the papers on ongoing research project in conferences/seminars and paper publication in reputed journals.

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

➢ Guest lectures by eminent academicians and industry experts are arranged to create awareness and interest among the students and faculty to develop research aptitude.

➢ In house research funds, incentives for publication, best projects have introduced to induce research culture among faculty and students.

➢ R&D hours are included in the faculty individual Time Table to develop scientific temper, research culture and aptitude among students and faculty.

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.

Guiding student research: Dr. G R S Murthy for JNTUK University to guide research scholars.

Individual and Collaborative research:

S.No	Staff Name	Department	Topic of Individual and Collaborative research
1	Dr. G.R.S. Murthy	CSE	Face, Facial Expressions and Hand Gestures Recognition
2	Mr. A.Ramarao	CSE	QOS Routing in MANET
3	Mr. G.Satish Kumar	CSE	Node Deployment in WSN
4	Mr. D.Madhubabu	CSE	Clustering High Dimensional Data using Improved Artificial Bee Colony.
5	Mr. S.K.Nagul	CSE	Classification of OCR via Multi Layer Perception Classifier
6	Ms. K.Sadhana	CSE	Dealing With Heterogeneous Data in Huge Data Sets
7	Dr.M.Rajan Babu	ECE	Wireless Networks and Communications, VLSI
8	Dr.B.Sridhar	ECE	Signal and image processing
9	Dr.S.Sridhar	ECE	VLSI Signal and image processing
10	Mr. D.Naresh Kumar	ECE	Microwave antenna
11	Mr. V. Nancharaiah	ECE	VLSI Design and image processing
12	Mr. K.Prasanna Kumar	ECE	Microwave antenna
13	Mr. A.Pramod Kumar	ECE	Low power VLSI Design
14	Dr.Y.Narendra Kumar	EEE	Power System Operation and Control
15	Mr. B.T.Rama Krishna Rao	EEE	Power System Reliability
16	Mr. K .Ravi Sankar	EEE	Power Quality Improvement Using FACTS devices
17	Mr. B.V.S.Acharyulu	EEE	Power System Operation and Control
18	Mr. J. Rajesh	EEE	Power Quality Improvement in Power Converters
19	Mrs. T. .Nalini	EEE	Smart Micro Grid
20	Mrs G Kusuma	EEE	Renewable Energy Sources With Control
21	Dr.S.Sri Kiran	ME	Nano Materials, Composite Materials
22	Mr. Satish Pujari	ME	Composite Materials, Bio

			Mechanics
23	Ms. Fathimunisa Begum	ME	Nano lubricants
24	Ms. S.Hemalatha	ME	Industrial Engineering
25	Ms. G.Sivakaruna	ME	Composite Materials
26	Mr. K.V.Narasimham Dr.P.D.Sailaja Dr K Ramesh Mrs.M.Madhuri Mr R Bulli Babu Mr G.Srinivasa Rao	S & H	The study of dynamical behavior of few Infectious diseases through Mathematical Modeling.
27	Dr.P.D.Sailaja	S & H	Fixed points of non-commuting maps.
28	Dr.P.Tirumala	S & H	Contemporary Practices required for growth of organization.
29	Dr.M.Anupama Dr.J.V.S.K.V. Kalyani	S & H	(a)Extraction of Heavy Metal ions from ground water using Bio adsorption Method. (b) Separation of Carbohydrates using VBS.
30	Dr.P.Suseela Rani	S & H	Industrial relations in liberalized era in jute Industry.
31.	Dr. T.Hari Babu	S & H	Language through Literature-Indian English Drama
32	Mr. K.V. Narasimham	S&H	Discretization of delay differential equations and study on qualitative analysis
33	Mr. R.Venkateswara Rao	S&H	Applications of PIXE to Bio Environmental & Geology fields
34	Mr. G.V.Nagesh	S&H	Effect of Magnetic properties in Ni-Zn-Ferrite doped with Nd^{3+}.
35	Mr. M.Gangu Naidu	S&H	A study on perception of rural fund investors in north coastal Andhra Pradesh.
36	Mr. B.Vinay Kumar	S&H	Enhancing the employability of the engineering graduates in Seemandhra.
37	Ms. E.Jyothi	S&H	Environmental pollution.

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

The institute organizes interdisciplinary and department-wise workshops, training programmes and seminars focusing mainly on capacity building in terms of research and also to create research culture among staff and students.

Workshops/ Training Programs/
Sensitization Programs conducted/ organized by the Institution

S. No.	Date of the Event	Workshops/ Training Programs/ Sensitization Programs
1	24th Dec 2016	One day Workshop On Smart Grid/ Conceptulization & Implementation
2	24th Dec 2016	Cloud Computing
3	17th - 18th Dec 2016	Two day workshop on Transformer Designing
4	14th - 19th Nov, 2016	"Design and manufacturing tools using CATIA". conducted by CSM Technology, Bengaluru
5	19th – 21th Sep, 2016	Android App Development
6	13th -19th Sep, 2016	FDP on "Advances In Practical RF Antenna Design"
7	24th Aug 2016	Guest lecture on Power Electronic Converters
8	13th Aug 2016	Web Designing
9	16th July 2016	One day workshop on "Recent Trends On Electronic Systems"
10	16th – 21th June, 2016	Analytics With R
11	24th April 2016	One day Workshop on "Internet of Things"
12	25th Jan 2016	Guest lecture on Matlab/Simulink Based Modeling, Simulation, And Analysis
13	5th Jan 2016	Faculty Development program
14	6th Jan 2016	Guest lecture on Demand Management By Using Smart Grid Technology
15	1st -2nd April 2015	Two day Workshop on "Embedded system design with ARM and RTOS"
16	2nd Mar 2015	Guest Lecture on Power System Stability
17	15th -16th Feb, 2015	State level student convention
18	23rd -24th Jan 2015	Two day Workshop on "XILINX FPGA based Embedded and DSP Design"
19	31th Dec 2014	Big Data Analytics
20	28th Mar 2014	Guest lecture on Distributed Generation
21	4th April 2014	One day Workshop on "Image processing for Remote sensing & Technology"
22	3rd April 2014	one day Workshop on "VLSI Design and Signal Processing"
23	24th – 25th Jan, 2014	NNSC Work Shop
24	27th -31st Dec 2013	Five Day Workshop on Network Simulation Using NS2
25	28th June 2013	Trends in J2ME & Android

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

Based on the research specializations, research groups or individuals take up projects and publish papers in reputed journals. The expertise of faculty in research areas is given in the table below.

S.No	Staff Name	Department	Research Area
1	Dr.G.R.S. Murthy	CSE	Image Processing, Computer vision
2	Mr. A.Ramarao	CSE	Mobile Networks
3	Mr. G.Satish Kumar	CSE	Wireless Sensor Networks
4	Mr. D.Madhubabu	CSE	Data Mining
5	Mr. S.K.Nagul	CSE	Data Mining
6	Ms. K.Sadhana	CSE	Data Mining
7	Dr.M.Rajan Babu	ECE	Wireless communications
8	Dr.B.Sridhar	ECE	Signal/Image processing
9	Dr.S.Sridhar	ECE	VLSI Signal-Image processing
10	Mr. D.Naresh Kumar	ECE	Microwave Antenna's
11	Mr. V. Nancharaiah	ECE	VLSI
12	Mr. K.Prasanna Kumar	ECE	Microwave Antenna's
13	Mr. A.Pramod Kumar	ECE	VLSI
14	Dr.Y.Narendra Kumar	EEE	Power Systems
15	Mr. B.T.Rama Krishna Rao	EEE	Power Systems
16	Mr. K .Ravi Sankar	EEE	Power Systems
17	Mr. B.V.S.Acharyulu	EEE	Power Systems
18	Mr. J. Rajesh	EEE	Power Electronics
19	Ms. T. Nalini	EEE	Power Systems
20	Dr.S.Sri Kiran	ME	Nano Materials
21	Mr. Satish Pujari	ME	Composite Materials
22	Ms. Fathimunisa Begum	ME	Nano-Lubricants
23	Ms. S.Hemalatha	ME	Industrial engineering
24	Ms. G.Sivakaruna	ME	Composite Materials
25	Dr.K.Ramesh	S & H	Fluid dynamics
26	Dr.P.D.Sailaja	S & H	Fixed points theory
27	Dr.P.Tirumala	S & H	Human Resource Management
28	Dr.J.V.S.K.V. Kalyani	S & H	Inorganic Chemistry-Heavy Metal Ions from underground water samples

29	Dr.P.Suseela Rani	S & H	Management Studies
30	Dr. T.Hari Babu	S & H	Language through Literature- Indian English Drama
31.	Dr.M.Anupama	S & H	Applied Chemistry-Thin Layer Chromatography
32	Mr. K.V. Narasimham	S&H	Discrete Dynamical Systems
33	Mr. R.Venkateswara Rao	S&H	Application oriented Nuclear Physics
34	Mr. G.V.Nagesh	S&H	Material Science
35	Mr. M.Gangu Naidu	S&H	Financial Management.
36	Mr. B.Vinay Kumar	S&H	Soft Skills
37	Ms. E.Jyothi	S&H	Environmental Pollution.

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 for transfer of the information regarding research resources and conducts industry-institute collaborative programmes to meet the industrial needs.

Eminent Researchers / Resource Persons visited during last 4 years.

S. No.	Name of Resource Person and Organization	Dates
1	Dr. B.Pankaj Kumar, IUAC, New Delhi	29th Dec, 2016
2	Prof. N. P. Padhy, IIT ROORKIE	24th Dec 2016
3	Mr.Ch.Prasad, IIHT-Visakhapatnam	24th Dec, 2016
4	Mr. P. Kalidas Dora, Naval Dockyard	18th Dec 2016
5	Mr. G. Mani Kumar, Naval Dockyard	17th Dec 2016
6	Mr.I.Menhdi, Brain O Vision, Hyderabad	19th -21st Sept, 2016
7	Prof.N.V.S.S.Sarma, NIT-Warangal	18th Sept, 2016
8	Dr.M.Chakravarty, Scientist-G, DLRL, Hyderabad	18th Sept, 2016
9	Dr.Prashant K Mishra, Scientist-E, RCI, Hyderabad	17th Sept, 2016
10	Mr. Nitin Chourasia, Scientist-E, RCI, Hyderabad	15th Sept, 2016
11	Mr C.Sairam, Scientist-F, DLRI, Hyderabad	14th Sept, 2016
12	Prof. J.Srihari Rao, Retd. Professor, NIT-Warangal	13th Sept, 2016
13	Mr. Bhagawan Prasad, AGM, BSNL, Visakhapatnam.	16th Aug, 2016
14	Dr. N. Jayaram, NIT Kurkshetra	24th Aug 2016
15	Dr. K.T.B. Padal. Professor, Andhra University.	10th Aug, 2016
16	Dr. D.Sriramulu, Professor AITAM Tekkali.	9th Aug, 2016
17	Dr. C.D.Malleswar, Scientist-G & Director-NSTL, Visakhapatnam	16th July, 2016
18	Mr.Mithun Kumar, Predective Analytics, Bangalore	20th – 21st June, 2016
19	Mr.I.N.Murthy, Leva consulting, Banglore	17th – 18th June, 2016
20	Prof. D.V.L.N. Somayajulu, NIT-Warangal	16th - 21st June, 2016
21	Dr. R.B.V. Subhramanyam, NIT-Warangal	16th June, 2016
22	Mr. Bhagawan Prasad, AGM, BSNL, Visakhapatnam	15th June, 2016
23	Dr.B.Rajesh Kumar,Professor, Gitam University	15th March, 2016

24	Dr. Vadlamani Ravi, IDRBT, Hyderabad	27th Feb, 2016
25	Dr. Sidhartha Panda, VSSUT,Burla	25th Jan 2016
26	Dr. R Marshall, Plymouth State University ,USA	6th Jan, 2016
27	Prof. N. P. Padhy, IIT Roorkie	5th & 6th Jan 2016
28	Dr.G.Jaya Suma, Professor,JNTUK-V	30st Dec, 2015
29	Dr. CH. Srinivasa Rao, Professor, JNTU Kakinada	29th Dec,2015
30	Dr. B.T.Krishna, Professor, JNTU Kakinada	21st Dec,2015
31	Dr. M.Kameswara Rao, Assistant Professor, IIT Roorkie	15th Oct, 2015
32	Dr. B.V.M. Kumar, Associate Professor, IIT Roorkie	14th Oct, 2015
33	Mr. Satish Vallivetti , Advanced MINDS	10th Oct, 2015
34	Dr. B.V.M. Kumar, Associate Professor, IIT Roorkie	14th Oct, 2015
35	Mr. Satish Vallivetti, Advanced Minds.	10th Oct, 2015
36	Dr. Sidhartha Panda, VSSUT,Burla	2nd Mar 2015
37	Mr.P.C.Mahapatro, Steel Plant Project Director	17th Feb, 2015
38	Prof.P.S.Avadhani, Vice-Principal, Andhra University	17th Feb, 2015
39	Mr.Nirmal Raj, Senior-HR, Rand Stand	17th Feb, 2015
40	Mr.L.VJ.Kishore, Director, Database Architecture, Guardian Insurance, USA	31st Dec, 2014
41	Mrs. Ch.Baby Rani, Scientist-D, DRDO- Hyderabad	12th Oct, 2014
42	Dr. Raj Kamal, M.I.S.T Engineering College,Indore	11st -12th July, 2014
43	Prof. D. Das, IIT Kharagpur	28th Mar 2014
44	Mr.Savneet Singh, Mr.Kunal Dudeja, Network Bulls in association with IIT-Delhi	24th -25th Jan, 2014
45	Mr.Amit Kumar ,Mr.Vimal Dixit, Mr.Omesh Kumar, Mr.Adarsh Kumar, Nex-G –Skills & Nex-G-Mobiltiy Divisions	27th -31st Dec, 2013
46	Mr.K.Viswanadham, Tech Mahendra Location Head	27th -31st Dec, 2013
47	Mr.Ravi Chandra, Tech Mahendra-ADM	27th -31st Dec, 2013
48	Prof.S.Pallam Setty, Andhra University	27th -31st Dec, 2013
49	Mr Abraham Varghese, Scientist-F, NSTL, Visakhapatnam	2nd Nov, 2013
50	Dr. G.Prasad, Scientist-G, NRSC-Hyderabad	3rd March, 2013

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 20% of the faculty members have utilized Sabbatical / Study / Academic leave for their activities towards research.

➢ The institute also provides academic leave to the faculty who are required to attend the coursework as a prerequisite in the process of research.

The following members are availed on Academic leave for Ph.D work.

S.No	Name of the Faculty	Department
1	Dr.M.Rajan Babu	ECE
2	Dr.B.Sridhar	ECE
3	Dr.S.Sridhar	ECE
4	Dr.Y.Narendhra Kumar	EEE
5	Dr.P.D.Sailaja	S & H
6	Dr.T .Hari babu	S & H
7	Dr.M.Anupama	S & H
8	Prof A Rama Rao	CSE
9	Mr.G.Sateesh	CSE
10	Mrs. K Sadhana	CSE
11	Mr.D. MadhuBabu	CSE
12	Mr.A.Promod Kumar	ECE
13	Mr.D.Naresh Kumar,	ECE
14	Mr.V.Nancharaiah	ECE
15	Mr. B. V. S. Acharyulu	EEE
16	Mr. B.T.Rama Krishna Rao	EEE
17	Ms.T.Nalini	EEE
18	Ms. Fathimunnisa begum	ME
19	Ms. S.Hema latha	ME
20	R.Venkateswara Rao	S & H

Contribution to improve the quality of research and imbibing research culture on the campus:

➢ The research experience is shared among the peers for imbibing research aptitude and encourages the students and faculty towards development of research culture in the Institution.

➢ With the expertise in the areas of specialization, the extensive research is undertaken in R&D laboratories.

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

The initiatives taken up by the institution in creating awareness of relative findings of research:

- ➤ Encourage students to take up projects related to industry and society needs.
- ➤ Students are motivated to participate in various technological programmes and contests where they demonstrate their research and project works.
- ➤ Seminars/conferences/workshops are organized to create research awareness among students.
- ➤ The Institution encourages the faculty and students to participate and present research papers at national and International conferences.
- ➤ Latest research articles, methodologies, recent advancements are shared among the students.
- ➤ To build competencies in the area of emerging technologies and provide student training.
- ➤ Organizing industrial visits to the students to obtain the complete awareness on the current area of research development.

3.2 Resource Mobilization for Research

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

The budget details for research in the academic year 2016-17

S.No	Department	Major Heads of Expenditure	Amount	
			Sanctioned(Rs)	Utilized (Rs)
1	CSE	Hardware and Software	5,00,000	3,75,000
2	ECE	Infrastructure and Software	7,00,000	4,50,000
3	EEE	Advanced Equipment	5,00,000	3,30,000
4	MECH	Advanced Equipment	15,00,000	8,00,000

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 Institution is ready to provide seed money to promote the research by the faculty on request and the value of seed money is decided by the research committee.

The Seed Money for Research

S.No.	Department	Amount in Rs.
1	CSE	3,75,000
2	ECE	4,50,000
3	EEE	3,30,000
4	MECH	8,00,000

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

➢ The Students are provided financial support by the Institution allocating funds required to carry out the research projects.

➢ Financial assistance is offered for Innovative Projects, Internships, Industrial visits etc.,

➢ The Students are encouraged with cash prizes for creative ideas in developing projects.

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.

➢ Mr. Satish Pujari, a Professor of Mechanical Engineering is working on Biomechanics and a paper recently published in International Journal of Biomedical Engineering and Technology by Inderscience.

➢ Dr. B. Sridhar, a Professor of Electronics and Communication Engineering is working on Biomedical Image Processing and published a paper in International Journal of Biomedical Engineering and Technology by Inderscience.

➢ Dr. S.Srikiran, a Professor of Mechanical Engineering is working on Nano powders as lubricants and a paper recently published in Journal of Mechanical Science and Technology by Springer.

➢ Students of CSE and EEE have developed Library check in check out system.

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

- The Institution Library and Information Centre with its National & International Online/Offline Journals, text books, reference books and other relevant research material is utilized optimally as it is kept opened beyond the college working hours regularly as well as during the periods of vacations.

- Basic equipment of all laboratories is used to its optimum for carrying out the research.

- Each and every department of the institution is having Research laboratories equipped with research specific equipment/instruments together with associated software as well; using this faculty may carry out their research works and publish the results.

S. No	Department	Products Developed
1	CSE	Apps for various Applications
2	MECH	3D Printer, Low cost agricultural harvester.
3	ECE	Design of Water-level Indicator, Automation of Electronic equipments, Electronic Dust bin
4	EEE	Design of efficient power saving System

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.

Applied to various funding agencies for financial grant for conducting research projects.

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 research proposals are sent to various funding agencies for approvals.

- The college encourages the faculty to get research projects and provide motivational incentives by awarding cash prizes and enhancing credentials for promotions.

- Autonomy provided to principal investigators of respective projects as per the guidelines insisted by funding authorities.

3.3 Research Facilities

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

➢ The institution extends its well equipped Laboratories, Digital library and all computer labs as a research facility to its students and research scholars.

➢ On campus R&D Laboratories having advanced software enable the students and faculty along with research scholars to pursue research and to carry out projects.

➢ The online journals of IEEE, ASME, the eBooks, NPTEL video Lectures, National and International Print Journals, DELNET Membership facility are available in the Library.

Laboratory facilities for Research

S. No	Department	The Major Equipment
1.	**ME**	Variable Compression ratio, Petrol Engine Test Rig, Eddy current dynamometer loading, Universal Testing machine,
2.	**ECE**	Innovative ARM 926 kit, DSP TMS 320c6713 processors, Xilinx FPGA Boards- Spartan3, Vertex5, Anvyl Spartan6, Zed boards.
3.	**CSE**	R&D Lab with 75 Mbps internet and Wi-Fi facility, Mobile computing laboratory.

Licensed Software

S.No	Name of the Software
1	Windows 7 64 bit and 32 bit
2	Ms Office 2007
3	Ms Office 2003
4	Visual Studio 2010 Professional
5	SQL Server
6	Exchange Server
7	Adobe Dream Viewer
8	Oracle
9	Flash Pro CS5
10	NET Protector
11	Win 8.1 SNGL OLPL Academic
12	MATLAB 6.5, Simulink 5.0, Control System tool box,
13	Multisim 2001, Caspoc 2005, PSCADX4 Academic,
14	MATALAB 7.14, Control System Toolbox 9.3, Simulink 7.9, Simscape 3.5, Sim power System 5.6
15	Xilinx ISE systems Edition Software 12.1i (25 user license).
16	MATLAB with 15 Computer Application Software License No. 703286. Perpetual concurrent License - Academic Version: It include Signal Processing Toolbox, DSP System Toolbox, Communication System Toolbox,

	SIMULINK, Control Systems Toolbox, Image Processing Toolbox.
17	Three user licenses of Perfect RTOS (Software) to work along with INNOVATE ARM926 board.
18	ORCAD PSPICE Simulation tool of 15 user license from FTD automation pvt.ltd Bangalore.
19	CATIA-V5.R16

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

The institutional strategies for planning, upgrading and creating infrastructural facilities to meet the needs of researchers especially in the new and emerging areas of research are as under:

➢ Allocation of separate budgets to R&D Labs for Procuring advanced equipment and software in each department.

➢ Subscription to Research Journals.

➢ Enhancing infrastructural facilities for research.

➢ Encouraging departments to conduct seminars, guest lectures, workshops on emerging technologies and research areas.

➢ Encouraging students and staff to promote research by providing incentives to publish journals and to attend conferences.

➢ Motivates staff to apply for the projects from funding agencies and industries.

➢ Special Incentives for faculty to pursing their Ph.D.

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.

Applied to various funding agencies for financial grant for conducting research projects.

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

➢ Institutionally executed MOUs with industries allow faculty and students to visit industries and gain expertise.

➢ Institution encourages students to execute projects of their interest to work in the R&D laboratories and industries.

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

S.No	Information	Data
1	Seating Capacity	150
2	No of book titles	2668
3	Total No. of Volumes	25278
4	Reference Books	3668
5	E-Books	183
6	E-Journals	IEEE, ASME
7	Print Journals	50
8	Magazines	17
9	Back Volumes	705
10	Project Reports	294
11	Library Networks Membership	DELNET Facility
12	E-Learning Material	NPTEL Video Lectures

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

To enhance industry institute interactions and to improve the research facilities the Institution has established different laboratories

Facilities Created for Research & Development:

➢ Department of CSE & ECE have established Internet of Things (IoT) Laboratory in association with Tenent, Bangalore.

➢ Department of CSE & ECE with an association of Code Tantra to foster the programming skills for students and faculty.

➢ Department of ME has established Laboratory with UTM machinery to test the material properties.

➢ Department of ME and ECE have association with Tech Meet to establish the Laboratory on embedded systems.

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)

Few research achievements of the staff and students are considered to apply patents.

S.No.	Project Team	Project Details
1	Mr. P.Surya Kannan (EEE) Mr K.Ch.Ananth Kumar (CSE)	Library Check in- Check out System.
2	Mr.B.Janardhana Rao (ECE) Mr. M.Ramu (ECE)	The Women Security Android Application-'Suraksha'
3	Mr. K.Bharatwaj (ECE) Mr. N.Raghav(ECE)	GSM Based Solar Irrigation System
4	Mr . K.Siva Teja(ECE) Mr. M.Sankar Sai(ECE)	Waste Bin Monitoring System Using GSM Technology.

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?

Not yet

3.4.3 Give details of publications by the faculty and students for last four years:

S.No	Activity	Total
1	Publication by faculty	325
2	Papers published by faculty with students	213
3	No. of publications listed in International Data Base	-
4	Monographs	-
5	Chapter in Books (Manuals)	-
6	Books edited	-
7	Books with ISBN / ISSN	-
8	Number of papers having Citation Index	47
9	Number of papers having SNIP / SJR	6/19
10	Number of papers having Impact Factor	242
11	Number of papers having H-Index	38

3.4.4 Provide details (if any) of

➢ **Research awards received by the faculty**

Not yet

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

Details of Faculty membership in Professional Societies:

S.No	Professional Society/Body	Category of Membership	Total No
1	Institution of Engineers(India)	FIE, MIE,AMIE	03+30+44
2	Computer Society of India	Member	13
3	Indian Society for Technical Education	MISTE	15
4	Institution of Electronics and Telecommunication Engineers	MIETE	01

- Dr G.R.S.Murthy has chaired an IEEE Session at CSNT-2015.

- Dr. S. Srikiran has chaired an ELSEVIER Session at MLRIT-2016 at Hyderabad.

- Mr.P.Jagannadha Varma, CSI coordinator received National level CSI Active participation (Youth) award for the year 2015and best supporting SBC Award by CSI Visakhapatnam chapter in 2015.

- Mr. G.Prakash Babu- Training and Placement Officer, has received best placement officer in north costal region by AMCAT 2015

➢ **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. and M.Tech. Programmes in several institutions like state universities and foreign universities, NITs, and IITs.

- The administration encourages intra-departmental and interdepartmental R&D and Consultancy projects by providing the required amenities and needs

- Faculty members are encouraged by giving best faculty awards.

3.5 Consultancy

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

➤ The major objective of Institution - Industry Interaction Cell under R & D Cell is to collaborate with R&D organizations and industries for exchange of knowledge, industry exposure to align academia with industry.

➤ Industry experts are invited to the institute to share their knowledge and discuss industrial needs with the faculty and students.

➤ Industry visits are encouraged to get awareness on emerging technologies.

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

Policy: The Research and Development Cell encourages the faculty for taking up consultancy works at institute level;

Promotion: Providing information of faculty expertise, testing equipment and facilities through college website to negotiate consultancy works. A few of them are listed below:

1. Providing a platform for conducting various online examinations.
2. A Consultancy work is undertaken to test the strength of various materials through Universal Testing Machine (UTM), Design of water level system, Visitor monitoring & CC Surveillance, attendance monitoring app and water purity analysis.
3. Various Skill Development Programmes on Electrical House Wiring, Carpentry, MS-Office and Communications Skill enhancement.

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

The institution encourages staff and students to utilize its available resources to promote consultancy work and share the generated finance in a ratio of 3:1 between the expert staff & students and Institution.

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	Nature of Consultancy Works	Amount Generated (Rs.)
1	Experimental work on UTM from students of VITS, Visakhapatnam	1000.00
2	Experimental work on UTM from students of Raghu Engineering College, Visakhapatnam	1400.00
3	Experimental work on UTM from students of ANITS, Visakhapatnam	4000.00
4	Experimental work on UTM from students of Miracle, Vizianagaram	2000.00
5	Design of water level system to a couple of Buildings	50,000.00
6	Design of Visitor monitoring and cc survalvance	50,000.00
7	Design of Attendance Monitoring App	30,000.00
8	Online Examinations through TCS-ION	8,00,000.00

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?**
The institution shares the finance generated in a ratio of 3:1 between the expert staff & students and Institution for development and maintenance of its various equipment.

3.6 Extension Activities and Institutional Social Responsibility (ISR)

3.6.1 **How does the institution promote institution/neighbourhood/ community network and student engagement, contributing to good citizenship, service orientation and holistic development of students?**

➤ Institution educates the faculty and students of their Social responsibilities by making them aware of different national calamities and rehabilitation activities, ill effects of environmental pollution, deforestation, Swatch Bharath, rain water harvesting, recycling of sewage water, illiteracy, malnutrition, immunization and Blood Donation etc by inviting social workers and environmentalists to the college.

➤ Institution has an NSS unit sanctioned by JNT University Kakinada- with a total strength of 100 members. Periodically University releases its activity calendar for organising different social service and community development programmes

as part of inculcating social responsibility among the students. Subsequently the institution's NSS Unit organizes special camps every year in nearby adopted villages to promote digital literacy, health care and monitoring, traffic awareness, plantation etc.,

➢ Career Guidance Cell (CGC) under Training & Placement cell of the institution plays a major role in enhancing confidence levels of students through series of personality development programmes for making them industry ready.

➢ Institutional Entrepreneur Development Cell (EDC) aims at developing entrepreneurial spirit and shaping the personality of students by equipping them with necessary technological and professional competent skills for making them employable and productive.

➢ Every Year the students are allowed to participate in different curricular and co-curricular events being organized within the departments and across various colleges around.

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

➢ The Institution's NSS unit hails the responsibility of monitoring student involvement in different social service and community welfare activities by way of noting down their participation details and achievements in their respective bio data files and counselor diary etc.

➢ The Institute is keen to drive the students for taking part in making the campus a plastic free environment.

➢ Engineers Without Borders student chapter focuses on developing the interest of undertaking the projects with social relevance.

➢ Energy Saving Club massively brings awareness among the students and staff about the conservation of energy to make each one of them socially responsible

➢ Photography Club encourages developing the passion of photography and allows the peers to make message oriented short films.

➢ A group of students are motivated to come up with need based awareness programmes on demonetization, cashless transactions, enrolment of vote franchise etc.

Glimpses of such Programmes:

- On 14th August, 2016, A mega **BLOOD DONATION CAMP** was organized in association with Redcross Blood Bank, N.T.R Blood Bank, A.S. Raja Voluntary Blood bank in which *303 units* of blood was collected.

- On 6th October, 2016, A mega **BLOOD DONATION CAMP** was organized in association with Redcross Blood Bank, N.T.R Blood Bank, A.S. Raja Voluntary Blood bank in which *269 units* of blood was collected.

- On the occasion of Mahatma Gandhi' Jayanti, NSS Unit conducted competitions like Elocution, Essay writings, Quiz competition for school children at ZP high school, Jonnada village. In this programme, an awareness on trouble shooting the computer programmes among the school children.

- A three Hour Dance Ballad "*Niranthara Nrutya Geethika*" involving 123 participants in different groups representing different problems in the society was organized by NSS unit on 31st December, 2015 to welcome the upcoming year 2016 with a social consciousness.

- On 1st Jan 2016, NSS unit volunteers celebrated New Year day by taking part in cleaning the Municipal Park and PSR Colony at Vizianagaram on call for *Swachh Bharat*.

- On 7th Feb 2016, volunteers of student volunteers served around 55 AIDS affected orphan children under the age group of 4-9 yrs at an Orphan Home named "SHANTHI NIVAS" in Gotlam near Vizianagaram.

- Our Cultural Club conducted Sujalam-Suphalam awareness programme in association of Eenadu Daily to make the people aware of the importance of saving water through a Flash Mob.

- On 7th June 2016, students conducted *my brick-my Capital* fund raising initiative in support of constructing the new Capital of Andhra Pradesh at AMARAVATHI involving 350 members in an oath making activity. As part of it, the faculty has contributed their one day salary.

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

The institution solicits feedback from stakeholders on the overall performance and quality of the institute through both internal and external means.

- Student representative of each class communicates the student problems and requirements to the class coordinator and head of department concerned.
- Feedback is solicited from students through Suggestion - Complaint box.
- Class Coordinator and Head of Department interact with parents regularly to inform them about their ward's overall performance through meetings, letters and phone calls.
- Parents are allowed to offer their suggestions for mutual development.
- Exit feedback and suggestions are collected from outgoing students for the improvement of existing system.
- A registered Alumni association of passed out students render their suggestions towards uplifting the overall performance and quality of 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.

Institution is incessantly organizing different academic, social, cultural and community service based outreach activities to contribute for building a healthy society with the help of voluntary organization like NSS unit etc from its own generated fund.

S.No	Academic Year	Details	Amount Rs.
1	2016-17	Social, cultural and community service	35,000/-
2	2015-16	Social, cultural and community service	20,000/-
3	2014-15	Social, cultural and community service	22,000/-
4	2013-14	Social, cultural and community service	18,000/-
5	2012-13	Social, cultural and community service	40,000/-

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 is established with an objective to cultivate an attitude of social service in the minds of students and to groom them into responsible citizens.
- Institution undertakes various social and educational activities through its NSS unit. It promotes the participation of students and staff, in its proposed activities

through oral interaction, notice boards, circulars, website and social media networks.

➢ The Institution also motivates the students and staffs to take part in various initiatives of Youth Red Cross and Youth Rotaract Club. As part of it, every year students and staff donate considerable units of blood to Red Cross and other Blood Banks.

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?**

Institution takes initiation to conduct various socially useful programs as part of its corporate social responsibility. A few of such initiatives are:

➢ A survey is conducted to understand the social problems of D.Tallavalasa a village adopted by the Institution near to its campus as part of *Smart Village Concept*, a prestigious initiative of Govt. of AP in building villages smart.

➢ After this survey, the students conducted a special Camp during 18th June, 2016 to 23rd June, 2016 at D.Tallavalasa to empower the various sections of residents about disaster management, trauma care-counseling, school-education drop outs and utilization of Govt. welfare schemes etc.

➢ *Digital India* and *Make in India* the initiatives of Central Govt towards nation-building are supported by the students' surveys, skits, rallies in bringing the awareness among the rural masses about Pradan Mantri Jandhan Yojana, Mobile Banking etc.,

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.**

Extension activities of the institution enhance academic learning abilities and inculcate moral values and ethical skills among students as well as faculty. Students who took part in various social activities are found motivating other students and voluntarily come forward in addressing social problems and issues.

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?**

➢ Institution always motivates its students to educate themselves through community service as the curriculum extension interface. As part of it, various social outreach programmes are conducted for the welfare of its rural surroundings as social responsibility.

➢ Various social awareness camps are conducted in surrounding villages *Duvvupeta, Jonnada, Golaganipeta, Manyalapeta and D.Tallavalasa* for inculcating educational values among the students and community since 2010.

➢ In each of the programmes, an awareness is created about social stigmas like open defecation, addiction of alcohol, child marriages, child labour, superstitions etc.,

➢ It is found that the villagers actively go hand in hand with the volunteers in the process of addressing various aspects of community development.

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.**

In the process of conducting various outreach and extension activities, The Institution has forging relationship with *Rama Krishna Mission, Rotary International and Jana Vignana Vedika*.

➢ The Institution has taken up a fund raising activity for Polio Eradication with Rotaract International, Vizianagaram.

➢ In association with Rama Krishna Mission, Visakhapatnam, it conducted various rallies in promotion of ethical values for harmony in human life balance.

➢ In Collaboration with Jana Vignana Vedika the Institution has strived to create awareness among people about the importance of science in daily life and also to impress them about the evils of superstitions.

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 the following awards for its community service

➢ Best NSS Unit award from JNTU Kakinada for conducting special camps on

youth for rural development in 2012.

➢ District Best College in conducting Blood Donation Camps from District Collector, Vizianagaram in 2013.

➢ Vizianagaram Utsav Award 2015 and 2016 for conducting community development activities.

➢ District Best Smart Partner Award by District Collector of Vizianagaram in Sankranthi Sambaralu-2017 for the service rendered to partnered village.

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 R&D and Institute-Industry Interaction Cells continuously interact with Research Institutes, Laboratories and Industries to have collaboration for research activities in the campus. Few of the collaboration with

➢ **Ski Detail** for R & D and consultancy activities in Product development.

➢ **Tenent Tech** to arrange Faculty for Student training and placement on "Internet of Things".

➢ **CG Corel technologies** to arrange Faculty, Student training on "VLSI" design fundamentals.

➢ **Code Tantra** to arrange Student training on "Technical Development".

➢ **Tech Meet** to arrange Student training on "Embedded systems" for exposure on practical and Industrial aspects.

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.

➢ The collaboration between **Ski Detail** and Department of Mechanical Engineering is to work jointly for enhancing the quality of education and provide continuous interaction between Industry and Institution.

➢ The collaboration between **Tech Meet** and Department of ECE is to work jointly

for enhancing the quality of education imparted to students of Electronics and Communication Engineering Discipline and provide continuous interaction between Industry and Institution.

➤ The collaboration between **Tenent Tech** and Department of ECE, to work jointly for enhancing the quality of education imparted to students of Electronics and Communication Engineering Discipline and provide continuous interaction between Industry and Institution.

➤ The collaboration between **CG Coreel Technologies** and Department of ECE to work jointly for enhancing the quality of education imparted to students of Electronics and Communication Engineering Discipline and provide continuous interaction between Industry and Institution.

➤ The collaboration between **Code Tantra** and Department of CSE, to work jointly for enhancing the quality of education imparted to students of Computer Science Engineering Discipline and provide continuous interaction between Industry and Institution.

➤ The Institution has the MOU with TCS-ION, infrastructure service provider to host online services.

➤ The Institution has the MOU with HCL, RISE, Caliber.

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 interactions contributed to the up gradation of academic facilities as specified below:

➤ Organising of guest lectures, workshops and seminars in the institution by inviting scientists and industrialists benefitted student and faculty community as well.

➤ Faculty and students are trained to meet the societal problems technological needs of industry and society.

➤ Both faculty and students are benefited by organizing Industry oriented sessions 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.

Eminent Researchers - Resource Persons visited during last 4 years.

S. No.	Name of Resource Person and Organization	Dates
1	Dr. B.Pankaj Kumar, IUAC, New Delhi	29th Dec, 2016
2	Prof. N. P. Padhy, IIT ROORKIE	24th Dec 2016
3	Mr.Ch.Prasad, IIHT-Visakhapatnam	24th Dec, 2016
4	Mr. P. Kalidas Dora, Naval Dockyard	18th Dec 2016
5	Mr. G. Mani Kumar, Naval Dockyard	17th Dec 2016
6	Mr.I.Menhdi, Brain O Vision, Hyderabad	19th -21st Sept, 2016
7	Prof.N.V.S.S.Sarma, NIT-Warangal	18th Sept, 2016
8	Dr.M.Chakravarty, Scientist-G, DLRL, Hyderabad	18th Sept, 2016
9	Dr.Prashant K Mishra, Scientist-E, RCI, Hyderabad	17th Sept, 2016
10	Mr. Nitin Chourasia, Scientist-E, RCI, Hyderabad	15th Sept, 2016
11	Mr C.Sairam, Scientist-F, DLRI, Hyderabad	14th Sept, 2016
12	Prof. J.Srihari Rao, Retd. Professor, NIT-Warangal	13th Sept, 2016
13	Mr. Bhagawan Prasad, AGM, BSNL, Visakhapatnam.	16th Aug, 2016
14	Dr. N. Jayaram, NIT Kurkshetra	24th Aug 2016
15	Dr. K.T.B. Padal. Professor, Andhra University.	10th Aug, 2016
16	Dr. D.Sriramulu, Professor AITAM Tekkali.	9th Aug, 2016
17	Dr. C.D.Malleswar, Scientist-G & Director-NSTL, Visakhapatnam	16th July, 2016
18	Mr.Mithun Kumar, Predective Analytics, Bangalore	20th – 21st June, 2016
19	Mr.I.N.Murthy, Leva consulting, Banglore	17th – 18th June, 2016
20	Prof. D.V.L.N. Somayajulu, NIT-Warangal	16th - 21st June, 2016
21	Dr. R.B.V. Subhramanyam, NIT-Warangal	16th June, 2016
22	Mr. Bhagawan Prasad, AGM, BSNL, Visakhapatnam	15th June, 2016
23	Dr.B.Rajesh Kumar,Professor, Gitam University	15th March, 2016
24	Dr. Vadlamani Ravi, IDRBT, Hyderabad	27th Feb, 2016
25	Dr. Sidhartha Panda, VSSUT,Burla	25th Jan 2016
26	Dr. R Marshall, Plymouth State University ,USA	6th Jan, 2016
27	Prof. N. P. Padhy, IIT Roorkie	5th & 6th Jan 2016
28	Dr.G.Jaya Suma, Professor,JNTUK-V	30st Dec, 2015
29	Dr. CH. Srinivasa Rao, Professor, JNTU Kakinada	29th Dec,2015
30	Dr. B.T.Krishna, Professor, JNTU Kakinada	21st Dec,2015
31	Dr. M.Kameswara Rao, Assistant Professor, IIT Roorkie	15th Oct, 2015
32	Dr. B.V.M. Kumar, Associate Professor, IIT Roorkie	14th Oct, 2015
33	Mr. Satish Vallivetti , Advanced MINDS	10th Oct, 2015
34	Dr. B.V.M. Kumar, Associate Professor, IIT Roorkie	14th Oct, 2015
35	Mr. Satish Vallivetti, Advanced Minds.	10th Oct, 2015
36	Dr. Sidhartha Panda, VSSUT,Burla	2nd Mar 2015
37	Mr.P.C.Mahapatro, Steel Plant Project Director	17th Feb, 2015
38	Prof.P.S.Avadhani, Vice-Principal, Andhra University	17th Feb, 2015

39	Mr.Nirmal Raj, Senior-HR, Rand Stand	17th Feb, 2015
40	Mr.L.VJ.Kishore, Director, Database Architecture, Guardian Insurance, USA	31st Dec, 2014
41	Mrs. Ch.Baby Rani, Scientist-D, DRDO- Hyderabad	12th Oct, 2014
42	Dr. Raj Kamal, M.I.S.T Engineering College,Indore	11st -12th July, 2014
43	Prof. D. Das, IIT Kharagpur	28th Mar 2014
44	Mr.Savneet Singh, Mr.Kunal Dudeja, Network Bulls in association with IIT-Delhi	24th -25th Jan, 2014
45	Mr.Amit Kumar ,Mr.Vimal Dixit, Mr.Omesh Kumar, Mr.Adarsh Kumar, Nex-G –Skills & Nex-G-Mobiltiy Divisions	27th -31st Dec, 2013
46	Mr.K.Viswanadham, Tech Mahendra Location Head	27th -31st Dec, 2013
47	Mr.Ravi Chandra, Tech Mahendra-ADM	27th -31st Dec, 2013
48	Prof.S.Pallam Setty, Andhra University	27th -31st Dec, 2013
49	Mr Abraham Varghese, Scientist-F, NSTL, Visakhapatnam	2nd Nov, 2013
50	Dr. G.Prasad, Scientist-G, NRSC-Hyderabad	3rd March, 2013

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 Department Advisory Committees for each department where eminent professors of the field as well as leading industrialists are empanelled. They 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.

c) Summer Placement

Collaboration with various industries - organizations helps the students to undergo short-term training and internship programmes during summer vacation period and semester break period.

The Institution deputes B.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.

➢ Institute also deputes faculty to exchange their research expertise at workshops, conferences and training programs arranged at other colleges-organizations.

➢ The Institution also arranges frequently Faculty Development Programmes inviting resource persons from NITs, and Industry

➢ The following programmes are arranged during last 4 years.

>   i) Excellence in Teaching-Learning Process
>   ii) Guidance and counseling for Teachers on their teaching individually
>   iii) Instruction Design and Delivery Techniques
>   iv) Student Feed Back and Performance Appraisal

e) Research

Department-Institute encourages the faculty to take up research projects offered by AICTE, DST, MHRD and other State and Central Government organizations. Institute is also extending incentives to the faculty who Participating workshops.

f) Consultancy

The College Consultancy Cell under R & D Cell 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

➢ Personality Development Programmes and frequent Assessment Tests in Aptitude, Reasoning and Verbal are conducted.

➢ The Institution has collaboration with JKC, AMCAT, COCUBES, NICOVENTURES, VOLTECH.

i) Introduction of New Courses

➢ Keeping in view the needs of the society and industry, few new courses-increase in intake are introduced.

j) 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 department organizes inter college festivals, seminars and technical paper contests, students from various institutions exchange their ideas by their active participation.

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

➢ Faculty will be sponsored regularly to attend important workshops and seminars organised by leading research organizations for establishing the linkages/ collaborations.

➢ College provides financial assistance to faculty for field visits and industrial visits to meet the consultancy demands.

➢ The Institution has MOUs with companies to train the faculty and students towards research activities and to take up sponsored projects.

**Plantation Awareness –
"Vanam-Manam"**

Service to Orphan Children

Mega Blood Donation Camp

**Work Shop on Smart Grid
Conceptualization and Implementation**

**Work Shop on Advances In Practical
RF Antenna Design**

Work Shop on Analytics With R

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 by keeping the following objectives for effective Teaching Learning process.

➢ The infrastructure is developed beyond the AICTE norms for the benefit of the stakeholders.

➢ Institution is always at the forefront in upgrading the facilities regularly as per the requirements of the departments. An ambience is created which is most conducive for effective teaching-learning process.

Process for Enhancement of Infrastructure:

➢ Plan for the need analysis of the required infrastructure in the Institution.

➢ Preparation of budget proposals for enhancement of Infrastructure.

➢ Approval from the Governing Body.

➢ Sanctioning of budget by Management Committee.

➢ Purchase committee negotiations on quotations received for purchasing to ensure good quality in procurements.

➢ Placing of purchase orders.

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.**

S. No	Facilities	Number	Area	
			in Sq. Mts.	in Sq. Ft.
1	Class Rooms	38	2736	29439.36
2	Tutorials	7	504	5423.04
3	E Class Rooms	9	648	6972.48

4	Seminar Halls	2	457	4917.32
5	Staff Cabins	158	963.8	10370.488
6	Drawing Halls	2	353.4	3802.584
7	Laboratories	32	3439.04	37004.0704
8	Library	1	527	5670.52
9	Placement Cell	1	277	2980.52
10	Sports Room	1	102	1097.52
11	Waiting Hall	2	73.28	788.4928
12	NSS Room	1	29.89	321.6164
13	Exam Cell	1	55.71	599.4396
14	Accounts office	1	77	828.52
15	Administration Office	1	223	2399.48
16	Counseling club	1	20.9	224.884
17	Guest room	1	24.71	265.8796
18	Management Room	1	51.24	551.3424
19	Canteen	1	491.8	5291.768
20	Toilets		320.29	3446.32
21	Parking Shed	3	132	1420.32
22	Generator Room	1	26.34	283.4184
23	Stores shed	1	94.31	1014.7756
24	Store Rooms	2	46.92	504.8592
25	Security Room	1	7.14	76.8264
26	Open air auditorium	1	968.68	10422.9968
27	Girls Hostel	1	1308	14074.08
28	Gym	1	491.8	5291.768

Classrooms:

➤ The institution has sufficient number of well-furnished, well-ventilated, spacious classrooms for conducting theory classes.

➤ Better Aspect ratio is maintained for proper visibility of chalk board and audibility.

➤ Each department is also provided with tutorial classrooms.

E-class rooms:

➤ Every department has required number of E-Class rooms with adequate seating capacity to enable the students better understanding the concepts through Animations, Online courses, NPTEL etc.

Seminar Halls:

➢ The Institution has a centrally air-conditioned and well equipped auditorium with a seating capacity of 500.

➢ The Institution has an open air auditorium with a seating capacity of 2000.

Laboratories:

➢ All laboratories are well equipped and maintained for carrying out lab and research activities.

Other Facilities:

➢ The Institution has a separate R & D (Research and Development) cell for research oriented activities.

➢ The Institution has exclusive English communication skills lab.

➢ Each department has a separate department library apart from the central library.

➢ The Institution has web-based materials, NPTEL video lectures.

➢ Garden

➢ College Radio cum Music Center

➢ Canteen

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

Sports, Outdoor and Indoor Games, Gymnasium:

➢ With a motto of *a sound mind requires a sound body,* the Institution is bringing together the ideas of "Knowledge is Power" and "Health is Wealth" by promoting sports and games to inculcate the spirit of sportsmanship.

➢ To develop team spirit, leadership qualities and organizing abilities among the students, Sports & Games meets are organized regularly in the college. Students of are encouraged to participate and prove their talents by allocating Sports & Games hour in Time Table.

Area available for Games & Sports Facility

S. No	Sports facility	Sq. Ft	Sq. Mt
1	Play Ground-I	159750	14841.26
2	Play Ground-II	37674	3500.02

Available Games & Sports Facilities

S. No.	Games & Sports Facilities	Number Available	
		Boys	**Girls**
1	Cricket Practice Net	1	
2	Cricket ground with Mat	1	
3	Kho Kho Court	1	
4	Basketball Court	1	
5	200 m Track	1	
6	100 m Track	1	
7	Chess Boards	6	
8	Carrom Boards	6	
9	Volleyball court	2	0
10	Tennicoit court	0	2
11	Throw Ball Court	0	2
12	Kabaddi Court	1	0
13	Table Tennis Boards	2	0

Auditorium:

The Institution has an Open Auditorium with seating capacity of 2000 for conducting cultural and college events.

National Service Scheme (NSS):

The Institution has an NSS unit with a total strength of 100 volunteers, affiliated to JNTUK, works with a motto of *Not Me but You* to cultivate the service attitude among the students and to make them into responsible citizens.

Cultural Activities:

The Institution encourages developing the innate talents of students in cultural activities through various clubs of Departmental Associations like Photography Club, E-Plus Club, Literary Activities Club, Music Club, Cultural Activities Club.

Communication Skills Development:

➢ An exclusive Digital Lab set up with Computer Assisted Language Learning (CALL) facility focuses on communication skill development. It is open free to have voluntary practices of basic language skills Listening, Speaking, Reading and Writing (LSRW) skills for the enhancement communication skills.

Yoga, health and hygiene:

➢ Yoga classes are conducted regularly by our faculty who are certified trainers for developing patience and harmony among students.

- The Institution is conducting regular health camps in association with Corporate Health Organizations.
- A dispensary with doctor and full time ANM.

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 institution is designed and constructed suitably with best infrastructure for the needs of engineering education.
- The Institution is always ready in developing the infrastructure for the academic requirements that benefits all stakeholders in general and the primary stake holder, the student in particular.
- To meet timely requirements, additional infrastructure facilities are also being created from time to time and developmental budget is allocated keeping in view such requirements.

Facilities Developed in the last four years and the amount spent:

Items	Expenses in 2016-17	Expenses in 2015-16	Expenses in 2014-15	Expenses in 2013-14
Acquisition of land; & new buildings and infrastructural built-up	2,77,78,194	4,11,912	65,49,818	-
Library Books & Equipment	3,13,414	8,70,107	6,09,591	3,38,421
Library E-Journal, Print Journals & Magazines	1,40,210	5,52,791	2,83,394	6,58,059
Laboratory Equipment & Software	10,46,429	29,22,782	59,88,486	16,13,565
Games and Sports	43,179	2,34,025	25,922	27,340
Buses & Cars purchase	32,11,432	46,86,689	53,68,993	24,57,533
Furniture	4,93,831	6,81,128	9,08,594	11,89,779
Administrative and other Expenditure	29,417,964	43,890,522	33,166,315	30,358,437
Generator purchase	-	2,74,000	-	-

Master Plan

S.NO	DESCRIPTION
1	PROPOSED TEMPLE
2	GIRLS HOSTLE
3	PROPOSED EXTENSION BLOCK
4	MAIN BUILDING BLOCK
5	GENERATOR ROOM
6	BOYS WASH ROOM
7	CANTEEN, GYM & GUEST ROOM
8	MECHANICAL BLOCK
9	BASKET BALL GROUND
10	GARDEN
11	VOLLEY BALL COURT
12	VOLLEY BALL COURT
13	VOLLEY BALL COURT
14	BALL BATTEN COURT
15	BALL BATTEN COURT
16	CRICKET GROUND
17	POWER ROOM
18	VEHICLES PARKING AREA
19	MAIN GATE

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

➢ The Institution has taken care by providing elevator facility that can be reached through ramps with railings for physically disabled students.

➢ Wheel chairs are also provided for physically disabled students.

4.1.5 Give details on the residential facility and various provisions available within Them:

Hostel facility:

➢ The Girls Hostel with internet facility under the supervision of Resident Matron is available within the campus.

➢ Boys' hostel is maintained under the supervision of a Senior Faculty member outside the campus.

Recreational Facilities:

➢ The hostel students are encouraged to make use of the playground for cricket, basket ball, volley ball etc, indoor games, under the supervision of caretaker.

➢ Hostels are provided with high speed Internet Wi-Fi, Computers, Television, News Papers and Magazines in reading room for recreation.

Facilities for medical emergencies:

➢ A full time medical assistant to meet the medical needs of hostlers along with a Four Wheeler Vehicle available 24/7.

Security:

➢ Round the clock security is provided through out the campus. Eight security guards and CCTV surveillance are provided.

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?

➢ Dispensary with visiting doctor and full time ANM available for students and staff are carried at Health Care Center in the campus.

➢ A four wheeler vehicle facility is provided round the clock to meet the medical emergency needs.

➢ Medical insurance coverage is provided to the staff.

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.

Facility	Availability
Internal Quality Assurance Cell (IQAC)	YES
Grievance Redressal Unit	YES
Women's Cell	YES
Counseling And Career Guidance Cell	YES
Placement & Training Cell	YES
Health Centre	YES
Canteen	YES
Recreational Spaces	YES
Safe Drinking Water Facility	YES
Auditorium	YES
Alumni Office	YES
NSS Office	YES

4.2 Library as a Learning Resource

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

Yes

Library Advisory Committee Members

S. No	Name of the staff	Department	Role
1	Dr. V. V. Rama Reddy	Principal	Chairman
2	Dr. B Sridhar	ECE	Coordinator
3	Mr. S. Sivaji Ganesh	Librarian	Co-Coordinator
4	Mr. R. V. CH. Sekhar Rao	ECE	Member
5	Mr. D. Madhu Babu	CSE	Member
6	Mr. K. Praveen Kumar Yadav	EEE	Member
7	Ms. P. Jagadamba	MECH	Member
8	Mr. M. Gangu Naidu	S&H	Member
9	Mr. B. Vinod Kumar	ECE	Student Coordinator
10	Mr. K Bharadwaj	ECE	Student Coordinator
11	Mr. A Rohith Kumar	CSE	Student Coordinator
12	Ms. V. Teja Sri	CSE	Student Coordinator
13	Mr. N Sai Ganesh	EEE	Student Coordinator
14	Ms.T Rama Lakshmi Harini	EEE	Student Coordinator

15	Mr. Alla Naveen Kumar	MECH	Student Coordinator
16	Mr. V V Ashok Vardhan	MECH	Student Coordinator

Specific initiatives of the Library Advisory Committee (LAC):

➢ The chairman and the members of the committee shall undertake all operations in coordination with the Librarian and other Library personnel.

➢ 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 based on the requirement.

➢ It ensures the up-gradation of the library to keep pace with the technological development.

➢ The committee suggests the books, journals, manuals and the digital processing of information, including on-line journals.

➢ It is also expected to motivate the student and staff utilization of the library.

➢ The procurement criteria, the library management, cataloguing and accessing administration are monitored by the committee.

➢ 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:

1. Total area of the library (in Sq. Mts.) : 527 sq. m.
2. Total seating capacity: 150
3. Working hours

On working days	9:00 AM to 6:00 PM
On Holidays	9:00 AM to 6:00 PM
On Examination days	9:00 AM to 6:00 PM
On Vacation	9:00 AM to 4:00 PM

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

Library Holding	2016-2017		2015-16		2014-15		2013-14		2012-13	
	No	Total Cost	No.	Total cost	No.	Total cost	No.	Total cost	No.	Total cost
Text Books	943	357229	1920	954882	1419	691868	1148	459870	1121	401212
Reference Books	175	61250	280	98000	240	84000	220	77000	230	80500
Journals /Periodicals	95	149954	164	152617	173	157137	85	109903	191	106141
E-Resources	198	865229	275	552848	1	12858	-	-	2711	982214
Any others	7	116237	-	18707	-	15427	36	163480	-	13620
Total(Rs.)		15,49,899		17,78.054		9,61,290		8,10,253		15,83,687

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

S. No	Details	Central Library
1	OPAC	Yes
2	Electronic Resource Management package for e-journals	Yes
3	Federated searching tools to search articles in multiple databases	Procurement in Progress
4	Library Website	Yes
5	In-house/remote access to e-publications	Yes
6	Library Automation	Yes
7	Total number of computers for public access	25
8	Total numbers of printers for public access	1
9	Internet band width speed	25Mbps
10	Institutional Repository	Yes
11	Content management system for e-learning learning	Yes
12	Participation in resource sharing networks/consortia (like DELNET)	Yes

4.2.5 Provide details (per month) with regard to Month

S. No	Details	Number
1	Average number of walk-ins	6200 per month
2	Average number of books issued/returned	Issue: 2500 per month Return: 2100 per month
3	Ratio of library books to students enrolled:	25268/ 2400 =10.52
4	Average number of books added during the last four years	5000
5	Average number of login to OPAC	100
6	Average number of login to e-resources	1000
7	Average number of e-resources +downloaded/printed	Downloaded: 900 Printed: 100

4.2.6 Give details of specialized services provided by the library with regard to

S. No	Details	Library
1	Manuscripts	Nil
2	Reference	Available
3	Reprography/Scanning	Available
4	Inter-library Loan Service	DELNET Membership available
5	Information Deployment and Notification	Available
6	OPACS	Yes, Available
7	Internet Access	Available, 25 MBPS
8	Downloads	Yes
9	Printouts	Yes
10	Reading list/ Bibliography compilation	Yes
11	In-house/remote access to e-resources	Yes
12	User Orientation	Yes
13	Assistance in searching Databases	Yes
14	INFLIBNET	No
15	IUC facilities	No

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

The Library staff always extends their services to the student and teachers of the Institution to look after in various aspects mentioned below.

➢ Lending and returning of books, journals.

➢ Display the information on new arrivals and media notifications in the library on the Notice Board.

➢ Regularly feedback is taken from visitors, faculty and students to procure new titles to support various research domains.

➢ All facilities of Library are available for the students beyond the college hours.

➢ E-resources are set readily available for the access.

- Access to the e-Journals, Periodicals is available across the entire campus
- Inter library loan facility is provided to the students and staff on DELNET.
- Previous university question papers will be provided to the students and staff as and they required.

4.2.8 What are the special   facilities offered by the library to the Visually/physically challenged Persons? Give details.

- The Elevator and wheelchair facility is provided to reach Library for physically challenged. In the Library, the staff and fellow students of visually challenged are encouraged to support the needy.
- Visually/physically challenged are given first priority to collect required books without waiting in the queue.

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 he feedback analyzed and used for further improvement of the library services?)

- Yes, Library collects the feedback through forms, suggestion box from its students, faculty and other users. Exit feedback is collected from the outgoing students regarding the library facility available in the campus.

  Strategies for improvement

- Library Advisory Committee reviews the feedback received. Important suggestions given in the feedback are discussed with the library staff and are facilitated as per the feasibility.

4.3 IT Infrastructure

4.3.1 Give details on the computing facility available (hardware and software) at the institution. Number of computers with Configuration (provide actual number with exact configuration of each available system)

1. IT Infrastructure

S. No	Configuration	No of Systems
1	IBM X3200 Intel XEON E3110 3.0GHZ Processor 2 GB RAM (DDR-2), 250 GB HDD,DVD Rom, Key Board, Mouse, 17"TFT (Samsung)	2
2	HP Compaq DX 2480,Intel Core 2 Duo 2.4 GHz processor,1GB DDR -2 RAM, 16 GB HDD (sata)17" TFT Monitor	123
3	IBM (Model Net Vista) Intel PIV - 1.8 GHZ 845 Mother Board, 256 RAM, 40GB HDD CD ROM, Key Board & Mouse, 17" CRT Monitor	15
4	HP DX 2480, Intel Core 2 Duo Processor, 2 GB RAM 320 GB HDD 18.5 TFT Monitor	45
5	HP PRO 3090 Desktop, Intel Core 2 Duo Processor,2GB RAM, 320 GB HDD, TFT Monitor	120
6	HP Elite 7100MT, Core i3 Processor 2GB RAM, 500 GB HDD, 18.5 TFT	60
7	HP Pro 3330MT,Core i3,500GB HDD,8 GB RAM ,Key oard,Mouse,18.5,LED Monitor	70
8	Hp Pro desk 400 G2 Desktop, Core i3, 4GB RAM 500 GB HDD,18.5 LED.	25
9	Intel Core 2 Duo Processor, 2 GB RAM 320 GB HDD 18.5 TFT Monitor (Assemble)	15
10	Dell Optiplex 330,Core 2 Duo/2GB RAM, 250GB/HDD,17"LCD Monitor/Key Board/Mouse	35
11	HP Pro DeSk 400 G3 , Intel i5 6500 3.2 GHZ, 8GB DDR 4 Ram, 1TB 7200 RPM SATA, 19.5 LED Monitor, NVIDIA GeForce GT 730 2GB PCIe x8 Graphics.	90
	Total	600

2. Computer-student ratio:

UG: 1:4 PG: 1:1

3. Stand alone facility

Nil

4. LAN facility

All computers are connected in the LAN.

5. Wi-Fi facility

Wi–Fi facility is available in the institution with 75Mbps speed within 20 meters range and this facility is extended to various locations in and around the campus.

Specifications:

S.No	Details	Number
1	INDOOR ACCESS POINT RADIOS 802.11 b/g/n high power wireless access point for 30 Mbps speeds, 20dbm RF power	4
2	POWERBACK-UP MODULE 24V power back-up Module with 220V charger and POE support for 24 hrs Pe	6
3	SECURITY SERVER MODULE with a 128 bit WEP	1

6. Licensed software

S.No	Name of the Software
1	Windows 7 64 bit and 32 bit
2	Ms Office 2007
3	Ms Office 2003
4	Visual Studio 2010 Professional
5	SQL Server
6	Exchange Server
7	Adobe Dream Viewer
8	Oracle
9	Flash Pro CS5
10	NET Protector
11	Win 8.1 SNGL OLPL Academic
12	MATLAB 6.5, Simulink 5.0, Control System tool box,
13	Multisim 2001, Caspoc 2005, PSCADX4 Academic,
14	MATALAB 7.14, Control System Toolbox 9.3, Simulink 7.9, Simscape 3.5, Sim power System 5.6
15	Xilinx ISE systems Edition Software 12.1i (25 user license).
16	MATLAB with 15 Computer Application Software License No. 703286. Perpetual concurrent License - Academic Version: It include Signal Processing Toolbox, DSP System Toolbox, Communication System Toolbox, SIMULINK, Control Systems Toolbox, Image Processing Toolbox.
17	Three user licenses of Perfect RTOS (Software) to work along with INNOVATE ARM926 board.
18	ORCAD PSPICE Simulation tool of 15 user license from FTD automation pvt.ltd Bangalore.
19	CATIA-V5.R16

7. Number of nodes/ computers with Internet facility

➢ All the systems are provided with internet connectivity.

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

➢ 75 Mbps speed Internet facility is available across the campus.

➢ An Internet hour is allocated in the Time Table.

➢ 600 Computers are available in the campus

➢ All the departments are provided computer centers with internet facility

➢ Wi – Fi connectivity is available in and around the campus with Guest Log-in too.

Specifications:

➢ Internet Service Provider : Bharat Sanchar Nigam Ltd., Reliance Jio 40 Mbps.

➢ Total Band width: 75 Mbps broad band connections.

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

Keeping in mind the importance of advancements in technology and the role of ICT in transfer of knowledge to the student community, the institute plans to develop the IT infrastructure:

➢ Providing computer with internet facility to all faculty.

➢ Needbased up-gradation of IT infrastructure with internet bandwidth is facilitated

➢ E-Classrooms are set up in all departments.

➢ Wi-Fi facility is provided to all students, staff and Guest Log-in too.

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:

Budget Head	2016-17	2015-16	2014-15	2013-14
Procurement	8,90,900	9,81,725	9,15,800	27,03,732
Up-Gradation	1,16,900	1,28,400	-	-
Deployment and Maintenance	-	-	-	-
Accessories	41,940	59,231	16,123	76,679
Total Amount spent in Rs.	**10,49,740**	**11,69,356**	**9,31,923**	**27,80,411**

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 an adequate computer facility for its faculty for preparation of teaching/learning materials in their respective departments.

➢ Centralized database system (EZ School) is available both for staff and students.

➢ The Institution provides LCD projectors with audio system to every department for using e-resources on NPTEL, MOOCS and various WEBINARS.

➢ The Institution provides ICT enabled seminar halls to all departments to use latest methodologies in the presentations.

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.**

To make the student attentive and engaged throughout the class is a challenge to every teacher. This is possible through effective and interactive teaching. Apart from teaching skills and the knowledge of the faculty, PPTs and relevant videos help the student to easily grasp the concepts and gain maximum information in the class room. Hence all faculty in the Institution are encouraged to use such modern methodologies. Practices using the provided ICT enabled Campus, are as following

➢ At Language Lab *Youtube* is used for posting the language learning activity videos to have peer review, *Edmodo interactive class room* is for stimulating tech-savvy students to use lab resources, *Socrative platform* is used for testing and *Google groups* for common communication.

➢ Visume, a video resume preparation is a practice among the final year students to reach national talent pool for grabbing opportunities.

➢ Library having access to various Online Journals allow students carry out challenging research oriented projects.

➢ Students are found enthusiastic in enhancing the conceptual knowledge by utilizing NPTEL Videos and other e-resources provided by the Institution.

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)?

Allocated and Utilization of Budget during last four years

S.No	Items	2016-17	2015-16	2014-15	2013-14
1	Building	7,40,205	2,82,458	95,590	46,373
2	Furniture	59,584	19,590	6,800	25,503
3	Computers & Software	60,585	3,68,844	3,17,707	1,08,155
4	Vehicles	52,60,256	63,82,115	49,72,615	28,99,491
5	Electrical Appliances	54,726	1,49,246	1,03,481	33,022
6	College	857,869	3,74,050	2,33,957	1,67,690
7	Lab Equipment	6,17,091	1,68,737	2,43,444	83,431
8	Library	1,40,210	5,52,791	2,83,894	6,58,059
9	Elect charges exp	19,36,895	23,73,539	13,84,710	13,35,529
10	Plant and machinery	1,52,546	83,555	1,16,582	73,292
12	Garden	1,95,392	34,505	36,020	15,230
	Grand Total	1,00,75,349	1,07,89,430	77,94,800	54,45,775

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

Institutional Mechanisms for Maintenance

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                              ┌─────────────┐
                              │  Principal  │
                              └──────┬──────┘
          ┌──────────────────────────┼──────────────────────────┐
          │                          │                          │
  ┌───────────────┐         ┌─────────────────┐         ┌─────────────┐
  │ Head of the   │         │ Administrative  │◄───────►│    Site     │
  │ Department    │         │    Officer      │         │  Engineer   │
  └───────┬───────┘         └─────────────────┘         └──────┬──────┘
          │
  ┌───────────────┐
  │   Faculty     │
  │   Incharge    │
  └───────┬───────┘
      ┌───┴────────────────┐
      │                    │
  ┌─────────┐      ┌──────────────┐
  │   Lab   │      │   Computer   │
  │ Mainte- │      │ Maintenance  │
  │ nance   │      └──────┬───────┘
  └────┬────┘             │
       └──────┬───────────┘
         ┌─────────────┐
         │  Technician │
         └─────────────┘
```

| Electrical Maintenance | Plumbing Maintenance | Civil works | Carpentry works | House Keeping |

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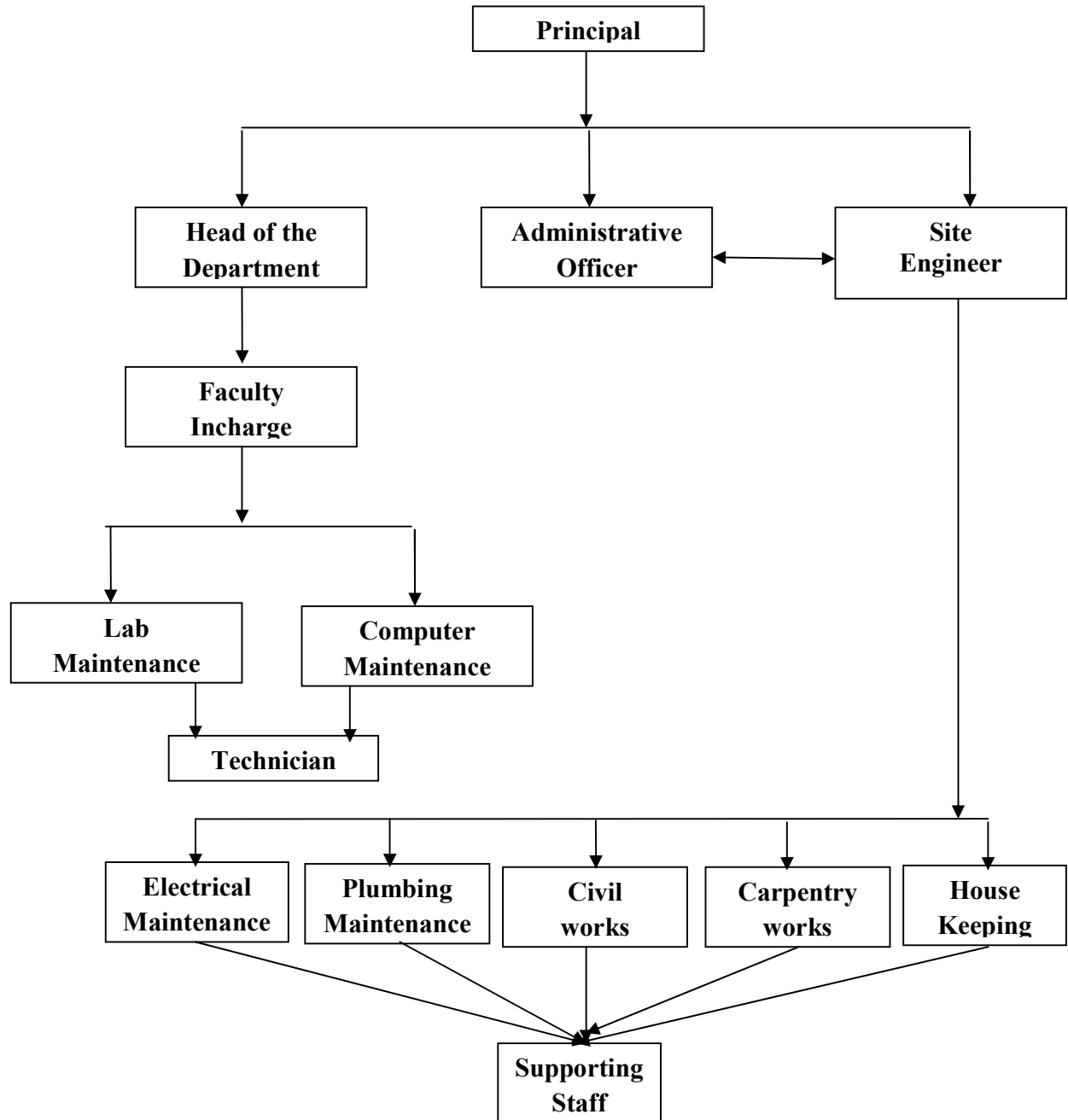
4.4.3 **How and with what frequency does the institute take up calibration and other precision measures for the equipment/ instruments?**

➢ Laboratory in-charge and technician make an inspection of equipment on a monthly basis.

➢ Equipment testing is done every semester to ensure the sufficiency of equipment to meet the laboratory needs.

➢ The equipment is sent for in-house or vendor maintenance if it is found faulty.

4.4.4 **What are the major steps taken for location, upkeep and maintenance of sensitive equipment (voltage fluctuations, constant supply of water etc.)? Any other relevant information regarding Infrastructure and Learning Resources which the college would like to include.**

➢ The Departments take steps to protect sensitive instruments from physical and electrical damage to have optimum performance of the equipment.

➢ To overcome the voltage fluctuations and to provide uninterrupted power supply, the Institution is equipped with an electrical substation and a generator with required rating that are located little away from the people's passage.

➢ An exclusive electrical maintenance section under the supervision of engineer with technicians and generator operators looks after the electrical equipment erection, testing and commissioning.

➢ Earth Pits are dug across the campus for the safe operation of sensitive equipment.

➢ Air-conditioning is provided to all computer labs for their safe working.

➢ Water supply is made near the needed equipments/lab and 24 hour water supply is ensured.
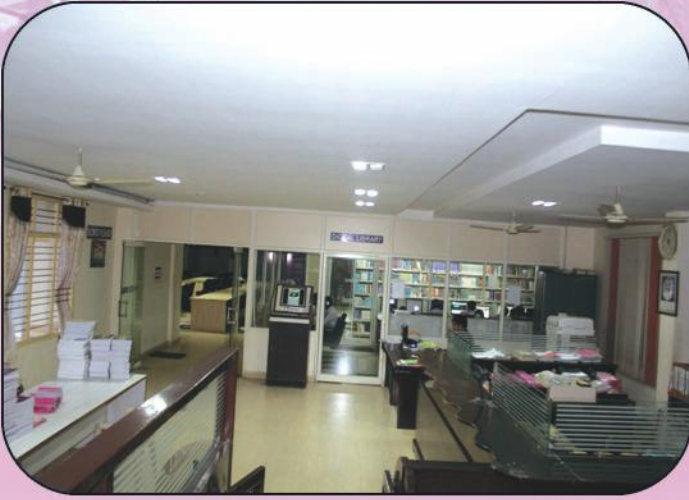
Circulation Section

Central Library - Reading Room

Digital Library
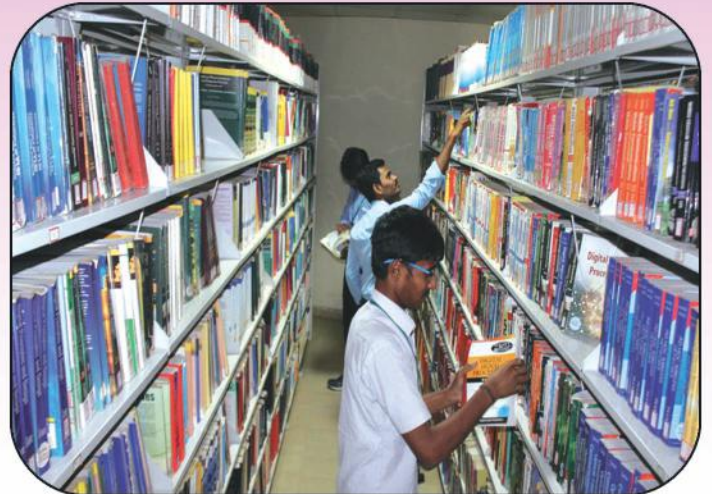
Textbooks & Reference Section

Basket Ball Court

Kho-Kho Ground

CRITERION V: STUDENT SUPPORT AND PROGRESSION

5.5 Student Mentoring and Support:

5.5.1 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 Institution publishes its handbook & prospectus every year and they are posted on Website to get them circulated among its stakeholders.

➢ Prospectus highlights the Academic regulations, Course structure, detailed syllabus and other rules and regulations related to the course.

➢ The Hand Book comprises vision and mission, disciplinary aspects, all information about departments, admission procedure and facilities provided by the Institution.

➢ The Institution brings out an annual college magazine which contains the curricular and co-curricular/extracurricular activities held during the academic year. It also highlights the research activities, technical/general articles published by students and faculty. In addition, the departments publish half-yearly News Letters which contain the details of all the curricular activities associated with the department.

5.5.2 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?

Year	No of Students	Financial Support from the Institution
2016-2017	69	Rs. 2,80,500/-
2015-2016	78	Rs.1,98,700/-
2014-2015	142	Rs.3,80,750/-
2013-2014	108	Rs.3,39,650/-

5.5.3 What percentage of students receives financial assistance from state government, central government and other national agencies?

Approximately 70% students are benefited by the financial assistance by the Government/Management

Category	2016-17			2015-16			2014-15			2013-14		
	Total Students	No of students	%	Total Student	No of students	%	Total Students	No of students	%	Total Students	No of students	%
SC	62	38	61.29	62	30	48.39	50	21	42	61	30	49.18
ST	8	5	62.5	10	3	30	6	1	16.67	9	5	55.56
BC	1516	949	62.60	1476	907	61.45	1232	748	60.71	1095	657	60
PHC	0	0	0	0	0	0	0	0	0	0	0	0
Minorities	20	20	100	16	15	93.75	12	12	100	6	6	100
OC	740	317	42.84	749	300	40.05	705	294	41.70	649	259	39.91
Total	2346	1329	56.65	2313	1255	54.26	2005	1076	53.67	1820	957	52.58

5.5.4 What are the specific support services/facilities available for

➢ **SC/ST, OBC and economically weaker sections:**
1. All SC /ST, OBC and weaker sections students receive financial assistance from the Government as per the Government regulations.
2. SC/ST students can borrow additional books from SC/ST book bank.

➢ **Physically challenged / other disabled students:**

The Institution has constructed ramps for the disabled and elevator and wheel chairs are provided for the needy.

➢ **Overseas students:**

The Institution does not have the provision to admit overseas students.

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

Students are encouraged to participate in extracurricular and co-curricular activities such as technical fests, cultural events, and sports events etc., that are organized by reputed institutions across India. All necessary support is provided by the institute. Faculty members are deputed to assist and guide the students in niche area.

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

Students are provided with medical assistance with the help of in-house ANM.

➢ **Organizing Coaching Class for Competitive Examinations:**

In house GATE coaching classes are conducted by both internal and external faculty. The Institution also conducts personality development programmes to enhance the IQ level and communication skills of the students.

➢ **Skill development (Spoken English, Computer Literacy, etc.)**

1. The students continuously practice communication through ELCS lab where attempts are made to overcome fear of public speaking that helps in facing the interviews confidently.

2. Enrichment courses like Personality Development Programmes are also conducted to improve students'personality and motivate them to have work life balance.

3. Technical training on need based computer programming languages is offered.

4. Campus Recruitment Training with Placement Assistance is provided.

➢ **Support for slow learners:**

Remedial classes are arranged for slow learners who are identified by a team of faculty members. Their progression is continuously monitored by the faculty members who include the class teacher and the student counselor.

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

Various workshops, talks and guest lecturers arranged by the Institution where eminent academicians and industry personnel are invited. The students are motivated to participate and present research papers in various National/ International seminars, Conferences and Workshops. The institution encourages the Industrial visits to leading corporate houses.

➢ **Publication of student magazines**

Departmental student Associations bring out Magazines that include all the activities of the institution through their association.

5.5.5 **Describe the efforts made by institution to be facilitating entrepreneurial skills, among the students and the impact of the efforts.**

The institution has an Entrepreneur Development Cell(EDC), which encourages the students to visualize their startups and become active job providers rather than job seekers. The institution conducts various programmes like seminars, guest lectures,

workshops, awareness programmes on "Entrepreneurship Development Skills" and career advancement. The cell envisions the needs of entrepreneurs and prepares a training module to equip the students with necessary skills. It focuses on various skills like Leadership Skills, Marketing Skills, Business Development Skills, Managerial Skills and etc.,.

Some of the activities conducted by the EDC are enumerated below:

S.No	Name of Program	Date of the Program	Resource Persons	Industry
1	Entrepreneurship Awareness Programme	19th Jan, 2017	Mr.T S V Ramana	CEO, Code Tantra
2	Entrepreneurship Orientation Programme	4th Jan, 2016	Mr. G Sudarshan	National Small Industries Corporation, GOI Enterprise
3	1-day Entrepreneurship Awareness Program	2nd April, 2015	Mr. I B. Raju,	GITAM University, Visakhapatnam.
4	Digipreneurship	4th Aug, 2015	Mr.P Rama Raju	Technical Head, Tech Mahindra
5	Need of Women Entrepreneurs and Real-time Problems	3rd Oct, 2015	Mrs. Anita,	Promoter of Medical Transcription

5.5.6 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.

Policies and Strategies for Promotion of Extracurricular and Co-curricular Activities:

➤ All the extra and co-curricular activities are effectively promoted and works under Sports and Games Committee, Cultural Committee, Literary Committee to enhance student participation in extracurricular activities.

➤ The Institution provides the required infrastructure in the campus to promote the extracurricular and co-curricular activities and Sports Track Suite to students for participating in major tournaments.

➤ The Institution encourages to participate in inter-collegiate tournaments on Volleyball, Basketball, Tennis, Table-Tennis, Athletics etc.,

- A Token of appreciation is given to winners and runners in intramural competitions for boys & girls at College Annual Day celebrations in the form of Cash Awards Medals, Mementoes and Certificates besides honoring best outgoing sportsman and sportswoman.

- The Institution provides financial assistance to students participating in extracurricular and co-curricular activities such as sports, games, quiz competitions, debates, cultural activities etc.

- The Institution conducts coaching camps to enhance their capabilities in sports and games events.

- The Institution gives additional academic support in the form of remedial classes for those who participate in Co-Extra-Curricular activities and Games & Sports.

- The Institution follows the university Time Table for the exams; hence there is no scope for flexibility in examination schedules still in internal exams the flexibility is given.

- Special diet is provided for the participants during the events.

5.5.7 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 College has a separate support system for the students appearing and qualifying in various competitive examinations.

- Students who are interested and willing to appear in various competitive examinations are helped by the teachers in matters of study materials and counseling for the right strategies.

- Students are allowed to have access to library and to refer the books related to entrance test.

- Students can appear in online examinations using internet facilities at our College.

- The Institution also creates awareness to appear for various competitive examinations like GATE/CAT/GRE /GMAT/ IELTS etc.,

Batch	GRE/TOFEL/CAT/MAT	GATE/PGCET
2012-16	3	2
2011-15	8	3
2010-14	10	9

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

The Institution takes initiative in addressing the academic, psycho-social & personal needs of the students for their mentoring, counseling and academic advises and they are recorded in counseling files.

Academic and Career Counseling:

➢ The class coordinators guide the students in academic & personal matters by offering the required help in terms of mentoring & counseling. Remedial classes are conducted for needy students.

➢ The students are helped by faculty in briefing about various opportunities and scope in the industry that helps them shape their career.

Personal and Psycho-Social Counseling:

➢ The students who seek psychological guidance are given psychological counseling by professional counselors.

➢ The Institution provides personal counseling in guiding them face their problem.

5.5.9 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 programs).

YES. The Institution has a structured mechanism for making MOUs with industry, career guidance and placements of its students through Training and Placement Cell. The various services offered through the cell are:

➢ Corporate training on Quantitative ability, Technical ability, Verbal ability, Logical ability, Group discussion, personal interview and communication skills to students for success in the recruitment.

➢ Orientation to the students prior to formal campus interviews by senior executives of major industries.

> ➤ Briefs the requirements of various companies and prerequisites to the students for succeeding in their selection processes.

LIST OF PLACEMENTS

Batch	List of Employers	Total Placements
2013-17	Tech Mahindra, AGS, Caliber, SLK Software, NTT Data, Genesys, Comtech, APPs Associates, C Core Tech, Efftronics, Soprasteria, Mylas Technologies, Aptroid, WNH, Invenio, Credencys, Tvarana, Virtusa Polaris	**103+**
2012-16	Tech Mahindra, NTT DATA, Incessant Technologies. OSI Technologies, Mphasis, CTS, Rajdeeinfo, Infosys, TCS, Tech Mahindra Pvt Ltd (ITES), Caliber, Ilantus, Control Print, Digitelecom, Just Dial, Wipro, HCL Technologies, Tech M (BPO), Invenio, Voltech, Yodlee, IBM Intership, Apps Associates, Formac, Persistent, Skidetail, Captain Tractor, Wynergies Castings, Cavision	**337**
2011-15	Tech Mahindra, Mindtree, IBM, Globussoft,, NTT Data, Emphasis, HCL Technologies, Infosys, TCS, Syntel, Miracle Software Solutions, Capgemini, Virtusa, Incessant, Infrasoftech, Zeta Interactive, Cavisson, Securens systems, Caliber, Genpact, Nisum Technologies, CTS, Hidden Brains, Indovation, Tega Industries, Indian army, Hublit, Deeepin Technologies, Rosca, Reddy Labs, Zealous solutions Wipro.	**203**
2010-14	Tech Mahindra, TCS, Infosys, Accenture, HCL Technologies, Nisum Technologies, Netpace, Vision Tech, Mphasis, Iatroshealth, Balaji Industries, Coramandel Electronics, Exel Global solutions, Citrix, Sensometic, Americal Mega trends, Dathri solutions, Amazon, Rise Corp, Yantrnet, L& T Infotech, HCL Technologies, Sutherland, Genpact, CMC	**168**

5.5.10 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. Grievance Redressal Cell actively interacts with the students to help them sort out their grievances and the necessary actions are taken.

Grievances and Redressal Committee.

S.No	Member in Committee	Position Held
1	Principal	Chairman
2	Vice Principal	Convener
3	All Heads of the Dept.	Member
4	Senior Faculty form each Department	Member
5	Senior Women Faculty	Member

5.5.11 What are the institutional provisions for resolving issues pertaining to sexual harassment?

The Institution has separate FEMINA WING which addresses the grievances of girl students. The institution enlightening the girl students through various awareness programmes.

Women Grievance Cell (*Femina Wing*)

S.No	Member in Committee	Position Held
1	Senior Lady Faculty	Convener
2	Women Faculty representative from each Department	Member
3	Student representatives	Member

5.5.12 Is there an anti-ragging committee? How many instances (if any) have been reported during the last four years and what action has been taken on these?

Yes, The Institution has an Anti-Ragging Committee formed to make sure the campus is ragging free. The Institution conducts awareness programmes on anti-ragging by District Legal Services Authority and District Police Department once in the beginning of the academic year of the college.

Anti-Ragging Committee

S.No	Member in Committee	Post Held
1	Principal	Chairman
2	Vice-Principal	Convener
3	All HODs	Member
4	Senior faculty in each department	Member
5	Student Representative	Member
6	Parent Representative	Member
7	Legal Member from Society	Member

5.5.13 Enumerate the welfare schemes made available to students by the institution.

➤ Providing financial assistance to paper presentations, innovative projects, economically weaker and meritorious students.

➤ Supporting facilities for getting educational loans

➤ Fee payment in installment is extended to needy students.

➤ Grievance Redressal cell.

➤ Free medical aid on the campus

➤ Placement assistance.

➤ Transport facilities.

➤ Remedial classes for slow learners.

5.5.14 Does the institution have a registered Alumni Association? If 'yes', what are its activities and major contributions for institutional, academic and infrastructure development?

Yes. The institution has a registered Alumni Association Lendi *Alumni Association(LAA)* on 8th Oct, 2016. The Association periodically holds meetings and helps the college administration with positive suggestions. All the passed out students of the college become members of the Alumni Association.

Activities and Contributions:

➤ LAA involved in the Development of the college and strengthen the curriculum in the form of their suggestions to fill the gap between academics and industry.

➤ Alumni contributed their books to the department library.

➤ A link established between its members, fresh graduates and Present students for career.

5.6   Student Progression:

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

Student Progression	Year	CSE	EEE	ECE	ME
UG to PG	2012-16	2%	2%	2%	---
	2011-15	5%	3%	3%	---
	2010-14	19%	6%	5%	---
Employed Through Campus selections	2012-16	62%	80%	92%	35%
	2011-15	58%	34%	50%	---
	2010-14	37%	18%	37%	---
Employed Other than campus recruitment	2012-16	3%	9%	3%	4%
	2011-15	10%	13%	11%	---
	2010-14	10%	7%	9%	---

5.6.2   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.

Batch	Branch	Over All Pass %	Number of First Division	Number of Second Division
2012-2016	CSE	85.3	83	10
	ECE	91.2	112	03
	EEE	84.0	98	02
	ME	83	103	05
2011-2015	CSE	94.0	91	03
	ECE	90.2	113	07
	EEE	95.4	119	06
2010-2014	CSE	90.8	84	15
	ECE	84.5	108	12
	EEE	93.3	101	12

5.6.3 How does the institution facilitate student progression to higher level of education and/or towards employment?

The institution facilitates student progression to higher level of education or toward employment as follows:

➢ The Institution provides in house training for employment and higher level education.

➢ Orientation to the students prior to formal campus interviews by senior executives of major industries.

➢ Pre Placement Training was conducted by JKC, Co-Cubes for IV B.Tech.

5.6.4 Enumerate the special support provided to students who are at risk of failure and drop out?

➢ Students who are at risk of failure and drop out are identified by the class in-charge based on their performance. The Head of the Department and Counseling Cell then provides guidance and academic support to these students. If required, the parents support may also be elicited.

➢ Remedial classes are conducted.

➢ Continuous counseling, attendance shortage monitoring and communication of the same to parents/guardian to ensure that the students enrolled complete the course successfully

5.7 Student Participation and Activities

5.7.1 List the range of sports, games, cultural and other extracurricular activities available to students. Provide details of participation and program calendar.

➢ The Institution has indoor and outdoor games facility and well developed playgrounds for Basketball, Volleyball, Shuttle Badminton, Kho- Kho , Kabaddi , etc.

➢ The inter-departmental annual sports meet held on the following events in every year:

- Team Events: Football, Basketball, Volleyball, Badminton, Cricket, Table-Tennis, Tug-of-War, Carom & Chess.

- Individual Events: Martial Arts, Power Lifting and Athletics

- Athletics: High Jump, Long Jump, Shot- put, Discuss & Javelin Throws.

➢ The Institution also organizes Annual Cultural Festival.

- A two-day fun-filled jamboree had as many as 30 competitive events with major attractions like sketching, face-painting, T-shirt painting, singing, dancing, miming, Tattoo making etc carrying attractive prize money.
- Student Participation in South Zone & All India Inter University , Inter-collegiate Regional & Central Zone Tournaments:

Tournament Name	Event	No. of Students Participated
2016-17		
Battle Of Champion International Shotokai Karate-Do Championsship-2016	Karate	1
7th Inter Collegiate Games Meet(Men 2016) Zone –A	Badmintion	5
	Volleball	12
	Basket Ball	12
	Kho-Kho	12
	Boxing	01
2015-16		
Asia Karate Do Championship	Karate	1
33rd All India Budokan Karate Federation Championship 2015		1
12th all India Open Karate Champioship High Power Cup 2015		1
6th JNTUK A-Zone Inter Colligate.	Volley Ball	12
	Kho-Kho	12
	Kabaddi	12
	Weight Lifting	01
	Cricket	16
Major Ports Sports Control Board, Visakhapatnam	Weight Lifting	01
2014-15		
JNTUK Inter Collegiate Tournaments Zone –A	Volley Ball	12
	Cricket	16
	Shuttle Badminton	5
	Kho-Kho	12
JNTUK Inter collegiate Foot Ball Tournament 2014	Foot Ball	16
1st National Level Karate Kung Fu Championship	Karate	1
34Th Open Karate Championship 2014		1
Vizag Steel Cup 2014		1
11th All India Open Karate Champion Ship Cmr Cup2014		1
AP State	Kick Boxing	1
	Weight Lifting	1
College Level	Kho-Kho	12

S.NO	EVENT/PROGRAMME	
2016		
1	Annual Day Celebrations in 2016	26th Feb, 2016
2	JNTU Cricket Tournament conducted at Lendi in Feb 2016	14th Feb, 2016
3	Lendi Alumni Association (LAA)Formation day	8th Oct, 2016
4	Anti Ragging Awareness Programme	21st July, 2016
5	Femina Wing Activity (Dr. I Devi, Assoc. Prof, OBG, KGH addressed on the importance of Female Food Habits)	25th Aug, 2016
6	Teachers Day Celebration 2016	5th Sept, 2016
7	Freshers Day 2016	27th Aug,2016
8	Engineers Day 2016	14th Sept, 2016
2015		
1	Nirvirama Nrutya Geethika	1st Jan, 2015
2	7th Annual Day	28th Feb, 2015
3	Womens Day 2015	8th Mar, 2015
4	Enterprenuership Awareness	3rd April,2015
5	Awareness on Environmental Protection	6th June, 2015
6	Blood Donation	7th July, 2015
7	Blood Donation	15th Aug, 2015
8	Anti Ragging Awareness	18th Aug, 2015
9	Freshers Day	23th Aug, 2015
10	Plantation	25th Aug, 2015
11	Teachers Day 2014	6th Sept, 2015
12	Engineers Day	16th Sept, 2015
13	Ant Ragging Awareness	26th Sept, 2015
14	Cricket Tournament Chairman bowling Cricket Cup 2015	25th Nov, 2015
15	Taksh Annual Day	31st Dec, 2015
2014		
1	Annual Day Celebrations in 2016	26th Feb,2014
2	Awareness on Environmental Protection	5th June, 2014
3	Blood Donation	6th July, 2014
4	Tech M Rahul Workshop	25th July, 2014
5	Teachers Day 2014	5th Sept, 2014
6	Engineers Day	15th Sept, 2014
7	CSI Quiz	17th Sept,/9/14
8	Personality Development Session by Gampa	23th Sept, 2014
9	Anti Ragging Awareness	25th Sept, 2014
10	Freshers Day	1st Oct,2014
11	CSI Student Convention Poster release	10th Dec, 2014

5.7.2 Furnish the details of major student achievements in co/ curricular, extracurricular and cultural activities at different levels: University / State / Zonal / National / International, etc. for the previous four years.

Tournament Name	Event	No of Students Participated	Prizes Won
Battle Of Champion Internotional Shotokai Karate/Do Championsship/2016	Karate	03	Silver Medal
33rd All India Budokan Karate Federation Championship 2015			Silver Medal
12th all India Open Karate Champion Ship High Power Cup 2015			Gold
12th all India Open Karate Champioship High Power Cup 2015	Karate	01	Gold Medal
Jntu Kakinada	Weight Lifting	01	Silver Medal
Major Ports Sports Control Board Visakhapatnam		01	Silver Medal
1st National Level Karate Kung Fu Championship	Karate	3	Silver
34 Th Open Karate Championship 2014			Silver
11Th All India Open Karate Champion Ship Cmr Cup2014			Bronze
AP State	Kick Boxing	01	Gold Medal
	Weight Lifting	01	Second Prize
2013-14			
Karate Champion Ship Amar Karate Cup2013	Karate	1	Bronze
Jntu K/'A'zone		1	Winner

Activity	No of Students Participated	No. of Students Won Prizes
2016-17		
Paper Presentations	5	1
2015-16		
Digital india Celebrations, Csi, Quiz Workshops, Paper Presenatation, Technical Exhibition Etc	240	41
2014-15		
Paper Presenatation, Essay Writing, Code Debugging Etc	94	7
2013-14		
Paper Presenatation, Quiz, Workshops Etc Paper Presenatation	19	---

Tournament Name	Event	No of Students Participated	Prizes Won
Battle Of Champion Internotional Shotokai Karate/Do Championsship/2016	Karate	03	Silver Medal
33rd All India Budokan Karate Federation Championship 2015			Silver Medal
12th all India Open Karate Champion Ship High Power Cup 2015			Gold
12th all India Open Karate Champioship High Power Cup 2015	Karate	01	Gold Medal
Jntu Kakinada	Weight Lifting	01	Silver Medal
Major Ports Sports Control Board Visakhapatnam		01	Silver Medal
1st National Level Karate Kung Fu Championship	Karate	3	Silver
34 Th Open Karate Championship 2014			Silver
11Th All India Open Karate Champion Ship Cmr Cup2014			Bronze
AP State	Kick Boxing	01	Gold Medal
	Weight Lifting	01	Second Prize
2013-14			
Karate Champion Ship Amar Karate Cup2013	Karate	1	Bronze
Jntu K/'A'zone		1	Winner

Activity	No of Students Participated	No. of Students Won Prizes
2016-17		
Paper Presentations	5	1
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Digital india Celebrations, Csi, Quiz Workshops, Paper Presenatation, Technical Exhibition Etc	240	41
2014-15		
Paper Presenatation, Essay Writing, Code Debugging Etc	94	7
2013-14		
Paper Presenatation, Quiz, Workshops Etc Paper Presenatation	19	---

5.7.3 How does the college seek and use data and feedback from its graduates and employers, to improve the performance and quality of the institutional provisions?

The institution has a mechanism of obtaining the feedback from graduates and employers to improve the performance and quality of the institutional provisions.

➢ The inputs obtained from graduates and employers are further used to improvise the overall consistency of the students for employability.

➢ Placement cell also collects feedback from employers at the time of placement.

➢ All data collected is reviewed and deliberated. These are then taken up for further discussion and implementation to improve performance and quality of the institution.

5.7.4 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.

➢ Students are given the required motivation and conceptual help for preparing technical papers at National level paper presentation contests.

➢ Departments encourage the students to prepare and display the working models during the project exhibition.

➢ College conducts technical paper presentation contests, for the students and encourages all the students to participate in conferences & technical fest to present their research & innovative thinking.

➢ The students are involved in various committee formed for organizing conference, workshop, guest lectures at institution & departmental level.

➢ The College encourages its students to publish materials like college magazine; Newsletters etc.

➢ The students are motivated to express their talent in the form of articles, paintings. The Institution magazine provides a platform to bring out their hidden talents. The teachers motivate the students to bring out the creative genius in them.

The Number of papers published by the students

Branch	2016-17	2015-16	2014-15	2013-14
CSE	5	19	22	29
EEE	0	12	14	10
ECE	0	31	31	31
ME	6	0	0	0

5.7.5 Does the college have a Student Council or any similar body? Give details on its selection, constitution, activities and funding.

The Institution has a student council elected by the student in each year on annual day celebration for next academic year for the welfare and activities of the students. In addition, the following activities are looked after:

➢ In every class has two class representatives to review the problems faced by the students.

➢ Every department has a student association (Vidhatri for M.E, Dhurva for ECE, Taksh for CSE and Lakshya for EEE) through which various events in the department are organized. The executive committees of these associations comprise President from final year, Vice-President from pre-final year.

➢ The student chapters of IEI, CSI,IETE, EWB are also lead the students in the professional direction..

➢ Adequate funds are provided by the management for the activities.

➢ The activities Expert Lectures, Technical Talks, General &Technical Quiz, Aptitude Tests, Workshops, and Group Discussions are generally undertaken by the Student Council.

The College Student Council

S.No	Position Held	MEMBER
1	President	IV Year Student
2	Vice President	III Year Student
3	General Secretary	IV Year Student (One from each Branch)
4	Additional Secretary	III Year student (One from each Branch)
5	Joint Secretary	II Year student (One from each Branch)

5.7.6 Give details of various academic and administrative bodies that have student representatives on them.

The Institution has various committees where the student representatives play a dominant role. The various committees are:

1. Academic Committee
2. Anti Ragging Committee
3. Assignment Monitoring Committee
4. Attendance Monitoring Committee
5. Canteen Committee
6. Class Work Monitoring Committee
7. Co Curricular & Extra Curricular Committee
8. Department Library Committee
9. Disciplinary Committee
10. Game & Sports Committee
11. Hostel Committee
12. Lab In-Charge Committee
13. Placement Cell Committee
14. Syllabus Monitoring Committee
15. Transport Committee
16. Women's Grievance Committee

5.7.7 How does the institution network and collaborate with the Alumni and former faculty of the Institution.

➢ Head of the Departments, Faculty and Staff maintain rapport with the Alumni.

➢ The former faculty of the institution is invited for annual day, conferences/seminars, and workshops of the relevant departments

➢ The Alumni is involved primarily as resource persons and employment providers.

➢ The former faculty members expertise will be used for the growth of academic development of both the teachers and the students.

Magazine Inauguration

Anti Ragging Awareness Camp

Two Day Workshop on Recent Trends in ECE

A Two Day Workshop on Transformers Designing

Sunny University Professors

Weight Lifting Champion

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:

Producing globally competent and quality technocrats with human values for the holistic needs of industry and society

Mission:

➢ Creating an outstanding infrastructure and platform for enhancement of skills, knowledge and behaviour of students towards employment and higher studies.

➢ Providing a healthy environment for research, development and entrepreneurship, to meet the expectations of industry and society.

➢ Transforming the graduates to contribute to the socio- economic development and welfare of the society through value based education.

Distinctive Characteristics of the Institution:

➢ Readiness to provide good infrastructure to cater modern technological needs of students.

➢ Inculcate the human values in the minds of students to serve the society in a better way   with civic responsibility.

➢ Enhance personality development skills to students that will help them to succeed.

➢ Create an atmosphere that makes the students of all cultures and regions to feel at home.

➢ Build a platform for students to incubate the entrepreneurship skills.

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 has an enthusiastic and visionary top Management.   The

Management, Principal, Heads of the departments and faculty are the constituent members of Internal Quality Assurance Cell (IQAC) that designs the quality policies based on the feedback of the stakeholders for improvement and implementation of the designed policies.

➢ IQAC convenes regular meetings with faculty to discuss quality policies and encourages the faculty to involve actively in implementation of policies and plans.

6.1.3 What is the involvement of the leadership in ensuring:

➢ **The policy statements and action plans for fulfillment of the stated mission**
The Principal, under the guidance of the Management, comes out with policies stated below for the fulfillment of the Institution's mission:

- Continuous enhancement of infrastructure.
- Conducting skill development programs.
- Organizing personality development programs.

➢ **Formulation of action plans for all operations and incorporation of the same into the institutional strategic plan**

- Heads of Departments under the guidance and supervision of Principal formulates the strategies like decentralization of authority, academic and financial freedom in line with Institution's strategic plan.

➢ **Interaction with stakeholders**

- The Institution interacts with all stakeholders through Institute website.
- The Institution interacts with all the stakeholders frequently and collects the feedback about the institution's performance in various aspects and also conducts alumni meets regularly.
- The Institution interacts with parents on regular basis and rewards the students for their outstanding performances.
- The Institution interacts with industrial experts and reputed academicians on the occasion of departmental student organization meets like LAKSHYA, VIDHATRI, DHRUVA, TAKSH.

- **Proper support for policy and planning through need analysis, research inputs and consultations with the stakeholders**

  The personal interaction of the Principal with various stakeholders plays an important role in ensuring his leadership. The Institution based on the collected information in the lines of need analysis, research inputs and consultations from stakeholders, provides the necessary support. Few of them are:

  - Providing financial support to encourage the organization of seminars, workshops and conferences with eminent personalities from industry and reputed universities.
  - Encourages regular industrial visits for the students and faculty to acquaint themselves with new technologies and industrial needs.
  - The management encourages the teaching faculty in the research and consultations.

- **Reinforcing the culture of excellence**

  The Institution has effective practices to reinforce the culture of excellence in technical education, placements and human values. Few of the best practices are:

  - Training classes for GATE and Competitive examinations
  - Collaboration with premier institutions and industry.

- **Champion organizational change**

  Change is inevitable. The Leadership is always vigilant in observing the changes in the global academic scenario, and updating the programmes and facilities accordingly.

  The organizational changes includes, the areas of Research & Development Cell, Entrepreneur Development Cell, development of state of art infrastructural facility, computer and internet facilities, Wi-Fi Campus, ICT enabled class room teaching, remedial classes for slow learners, Training for Campus Placements, Virtual Lab practices for Physics, other sciences and engineering subjects, Rain water harvesting, energy saving club, *Femina Wing.*

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?**

To ensure the effective implementation of the Institution's policies and plans, its regulatory bodies like Management Committee, Governing Body, College Academic Committee (CAC), Department Advisory Committee (DAC) and Internal Quality Assurance Cell (IQAC) meets at regular intervals.

The procedures adopted are:

➢ Based on the discussions and advices of Department Advisory Committees, the policies and plans are formulated by Management Committee and gets approval in the Governing Body meeting.

➢ The Principal and HODs design the action plans for implementation and monitoring mechanism of the approved policies and plans in the General Body meeting.

➢ The designed action plans are strictly implemented in the departments and principal's office, which are monitored by the Principal.

➢ Departmental meetings are organized regularly by HOD to seek feedback and enhancement of the policies.

➢ After IQAC's quality audit, suitable alterative actions are suggested for the challenges encountered during the implementation.

6.1.5 **Give details of the academic leadership provided to the faculty by the top management?**

The Institution's top management provides flexibility and freedom to the Principal and College Academic Committee for strategic implementation of the policies and plans. Some of the important academic leaderships provided to the faculty by the top Management are: IQAC, Vice-principal, Heads of the department, Exam cell coordinator, Department academic committee, Program committees, Class coordinators, Library committee, Professional societies, R & D cell, Discipline & anti-ragging committee, Grievance & Redressal committee and Training & Placement etc, for decentralization Mechanism of the Institution.

6.1.6 How does the college groom leadership at various levels?

To help the Principal in his administration, the Institution constitutes different committees for academic and administrative excellence.

The functionalities of various committees headed by a coordinator with 1 or 2 members from each department based on the requirement:

➢ IQAC- It evolves mechanisms and procedures for ensuring timely, efficient and progressive performance of academic, administrative and financial tasks.

➢ Vice-Principal- Coordinates all the committees for their smooth functioning.

➢ Heads of the Department (HOD) - Looks after the academic, research and student affairs in the respective department. HOD also establishes the connectivity between the Principal and all other stakeholders.

➢ Exam cell coordinator- Monitors the smooth conduct of mid and semester examinations as per the University schedule.

➢ Department academic committee- The Department Academic Committee along with the Head of the department conducts meetings and monitors the plan of action at regular intervals for rigorous implementation of the curriculum and academic calendars.

➢ Program committees- The committee monitors Course Outcomes (COs) of each course to match with the Program Outcomes (POs), Program Educational Objectives (PEOs) as per the vision and mission of the department.

➢ Class coordinators- Each coordinator takes care of his/her assigned classes with respect to the student's attendance and academic performance.

➢ Library committee- It ensures the maintenance of good volumes of books, e-journals, periodicals and effective utilization of library.

➢ R & D Cell- A coordinator of R &D Cell monitors the research activities in the Institution and shares the research proposal from different organizations to all Heads of the departments.

➢ Discipline Committee- It looks after the disciplinary issues across the campus.

➢ Anti-Ragging Committee- It conducts awareness programs on anti ragging and

resolves issues on ragging.

- ➢ Grievance & Redressal committee - It resolves the grievance of students and faculty.
- ➢ Women Protection Cell (*Femina Wing*) – It takes care of women issues and grievances redressal from girl students and lady faculty.
- ➢ Canteen committee – It makes sure that the food served is nutritious and hygienic in nature.

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 management recognizes the need for decentralization for the growth of the Institution. The Principal has the flexibility, given by the top management to accomplish the vision and mission of the Institution. The Principal provides operational autonomy to the heads of the department in academic pursuit and decision making. Academic responsibilities are fairly divided among all the staff members.

Operational autonomy of the Principal is decentralized into two categories namely:

1. **Academic Affairs:** Vice Principal and Heads of the departments are given the responsibility to carry out academic affairs.
2. **Administrative Activities**: Administrative office looks after office related activities.

6.1.8 Does the college promote a culture of participative management? If 'yes', indicate the levels of participative management.

Yes, Governing Body, a combination of Management, Principal, a few faculty, experts from Industry, nominees from University and Government designs policies of the Institution based on the suggestions given by the stakeholders. The Institution encourages the culture of involving all the stakeholders to be very participative in the implementation of policies.

6.2   Strategy Development and Deployment

6.2.1   Does the Institution have a formally stated quality policy? How is it developed, driven, deployed and reviewed?

Yes

- ➢ The Institution has a handbook of HR policies approved by College Management Committee outlines the harmony in the work culture augments assured quality. These policies shall be implemented meticulously.
- ➢ It makes the institution as a Centre of Excellence to escalate the stakeholders' value by a way of providing quality service to the society.
- ➢ IQAC of the Institution closely monitors the follow up of these strategies for the enhancement of quality.

6.2.2   Does the Institute have a perspective plan for development? If so, give the aspects considered for inclusion in the plan.

Yes. The Institution has constructive plans of development. It is always on its forefront to implement its strategic planning for substantial growth. The perspective plan of the Institution is obtaining autonomy by 2020 and University status by 2025 and the following are its futuristic plans for development:

- ➢ Maintaining Quality Education with human values.
- ➢ To have accreditation of APEX bodies now and to be autonomous Institution.
- ➢ To become a hub for Research activities.

6.2.3 Describe the internal organizational structure and decision making processes.
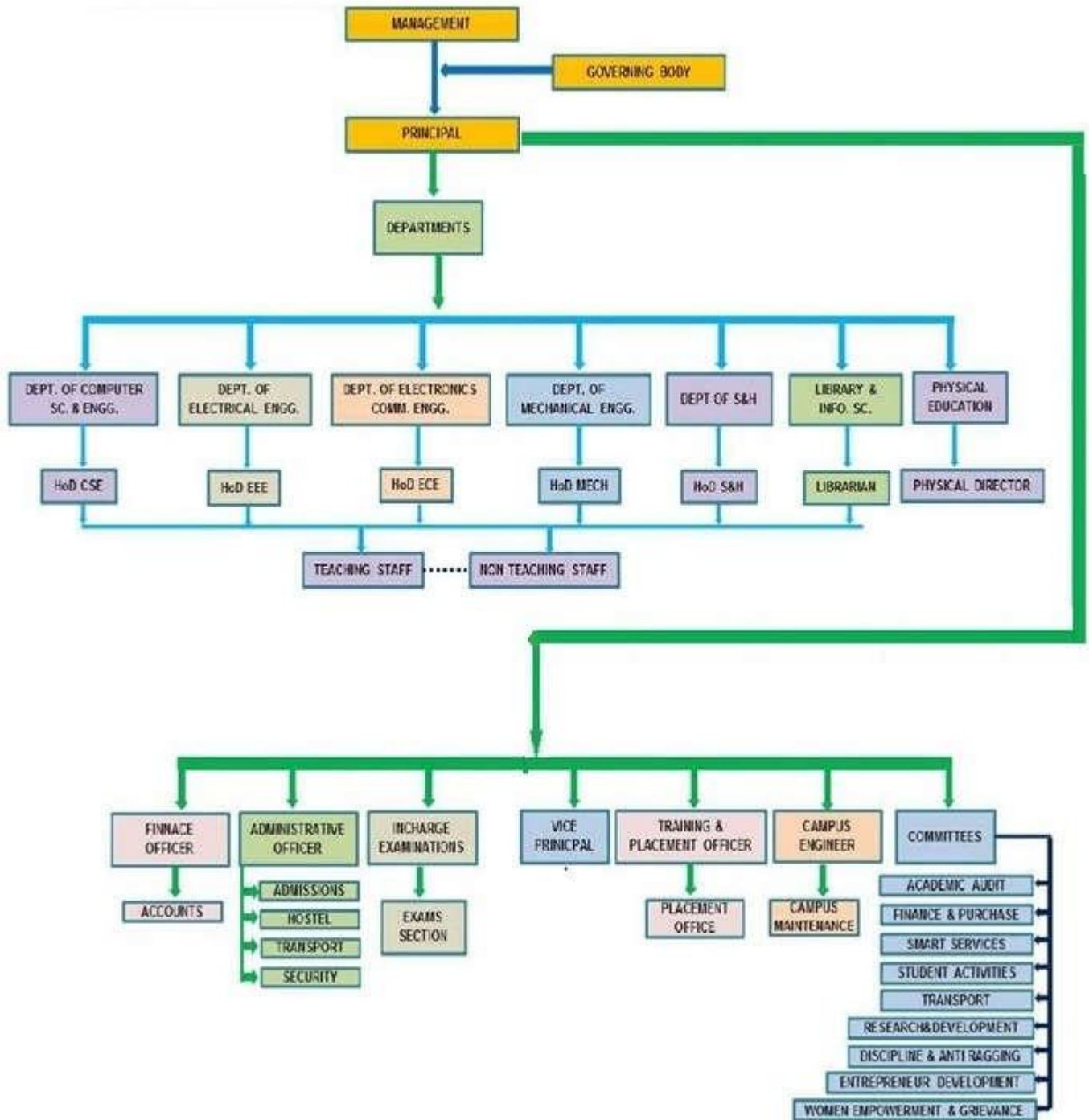
6.2.4 Give a broad description of the quality improvement strategies of the institution for each of the following

➢ **Teaching & Learning**

The Institution firmly believes that quality teaching learning process is benchmark for the growth and development of the institution.

Strategies adopted for quality improvement in the teaching learning process:

- Well qualified and experienced faculty is recruited for providing the quality teaching learning environment.
- The Institution provides the best infrastructure for enhancing quality teaching learning process.
- The sophisticated digital Central Library, with the wide range of books, magazines, NPTEL video lectures, and online journals, is established.
- Digital classrooms are provided in each department for effective delivery of lecturers through multimedia.
- In-house training for GATE/GRE/Campus placements
- Practical oriented teaching through seminars and Group Discussions (GD).
- Organizing guest lectures by eminent academicians and industry experts.

➢ **Research & Development**

Strategies adopted for quality improvement in research:

- The Research Laborites established for enhancement in research culture.
- Encouraging the faculty through incentives and rewards for their research, publications and projects.
- Financial assistance is given to students for innovative research projects.
- Various online journals are subscribed to have an open access in each department.

➢ **Community engagement**

Various activities like Blood Donation Camps, Free medical camps, Adoption of village for development, social activities are conducted.

➢ **Human Resource Management**

Strategies adopted for quality improvement for Human Resources

- Transparent policy document.
- The recruitment through an expert panel.
- Incentives for achievements of the faculty.
- Support for academic advancement.
- Providing Group Insurance and provident fund.
- Systematic performance appraisals and promotion policies.

➢ **Industry interaction**

Strategies adopted for quality improvement for Industry interaction

- Organization of industrial visits and tours.
- Deputing faculty and staff for industrial training.
- Guest lectures by industry experts

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 Principal ensures adequate information related to the teaching staff as well as non-teaching staff is collected in the form of feedback and self-appraisal reports.

➢ The Principal obtains feedback through periodic meetings with the heads of the departments and their staff.

➢ The feedback is forwarded to the management and stakeholders by the Principal through formal and informal meetings.

➢ The Management Committee regularly visits and interacts with the staff.

➢ The information is made available for the management to review the activities how they are performed or carried out.

6.2.6 How does the management encourage and support involvement of the staff in improving the effectiveness and efficiency of the institutional processes?

➢ The Management encourages the effective participation of the staff members in planning and implementation of the institutional processes that develops the nature of belongingness among the staff.

- The management encourages faculty to conduct FDPs and workshops to interact with eminent personalities from industries and esteemed universities.
- Management appreciates and rewards the faculty for their achievements in teaching, academic and research activities with incentives.

6.2.7 Enumerate the resolutions made by the Management Council in the last year and the status of implementation of such resolutions.

S.No	GB meeting Agenda	Action taken
1	Discussion and approval for the proposed budget for the financial year 2016-17.	The budget is approved
2	New lab equipment added after previous GB meeting.	Implemented
3	Analysis and statistical evaluation of the results of the previous semesters.	Initiatives for further improvement are discussed.
4	Approval of new faculty appointments after previous GB meeting.	Unanimously approved
5	Faculty recruitment as per the work load for the academic year 2016-17	Unanimously approved
6	Discussion on the particulars of condonation and detention of students in the academic year 2015-16. The details of readmitted students in the academic year 2015-16.	Satisfied on the process of readmission students
7	Discussion on placement track of outgoing students	Suggestions and improvements regarding placements are given.
8	Discussion on progression of NAAC accreditation progress	Suggestions are given for further process

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, affiliated university provides the provision of autonomy.

In the process of attaining autonomous status, the Institution is making efforts towards the accreditations such as NAAC and NBA.

6.2.9 How does the Institution ensure that grievances / complaints are promptly attended to and resolved effectively? Is there a mechanism to analyze the nature of grievances for promoting better stakeholder relationship?

The Institution has set up a Grievance Redressal Cell and Anti-ragging cell to discuss any complaint received from students and staff and recommends appropriate action to the authorities.

Grievance cell:

➢ Suggestion boxes placed on all corridors in the Institute for feedback/complaint/suggestion of all stakeholders.

➢ The cell reviews the grievances received and it gives suggestions on the issue to the Principal.

➢ Thereafter, the principal on reviewing and understanding the level of the problem forwards the same to the management committee for necessary action.

Anti-ragging Cell:

➢ The cell meets often to discuss the steps to be taken to prevent ragging in the campus.

➢ Mandatorily, anti-ragging undertaking is taken from students and their parents at the time of admission.

➢ Awareness programs are conducted to the students in association with AP legal Services Authority, Local Police, Progressive Psychologists Association and various NGOs about ragging act, punishments and consequences.

➢ Posters depicting the anti-ragging act and its punishments are displayed on all notice boards, corridors and at the canteen.

➢ Contact numbers of the anti-ragging committee members are displayed at various sensitive places across the campus.

Women grievance Cell (*Femina Wing*):

➢ The cell looks after the grievances of female students and women faculty.

➢ Suggestion box is placed at Women empowerment cell.

➢ The students also can report grievances directly through e-mail to lendifeminawing@gmail.com. The grievances are resolved time to time.

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?

No, there are no such issues.

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?

Yes, the institute has an effective mechanism of obtaining and reviewing the feedback from the students to improve the performance and quality of the institution.

Mechanism for Analyzing Student Feedback:

➢ The feedback on the Institution performance is obtained through online from the students. Apart from this, class coordinator and HOD obtains oral feedback regularly.

➢ Under the supervision of the Principal, the head of the department reviews the feedback of students and takes necessary actions for the improvement of the Institution performance.

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?

➢ The Institution encourages the teaching and non teaching staff Members to enhance their professional quality by conducting Faculty Development Programs (FDP), Skill Development Programs, introduction to Modern Teaching-Learning Methods and awareness programs.

➢ The Institution encourages the staff to participate in Seminars, Conferences and publishing papers in journals providing financial assistance.

➢ The Institution provides academic leaves to the staff for pursuing higher education.

➢ The Institution encourages faculty to deliver guest lectures and to attend the Faculty Development Programme (FDP)/ Staff Development Programme (SDP) outside the Institution.

➢ Encourage to use E-Journal, Internet & access to NPTEL Video lectures.

➢ Supports the participation of the faculty in Professional Bodies activities.

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?

➢ Various training programs are conducted to train the faculty by eminent academicians and industrial experts.

➢ The Institution encourages faculty to attend several refresher courses and FDPs.

➢ The Institution organizes FDPs, workshops and various motivational sessions for faculty empowerment.

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.

➢ The performance appraisal of the faculty is reviewed every year by the Principal and Management Committee upon receiving the remarks from the heads of the department.

➢ The performance of the faculty is evaluated based on Feedback analysis, Result analysis, publications, projects and contribution to the department and college.

6.3.4 What is the outcome of the review of the performance appraisal reports by the management and the major decisions taken? How are they communicated to the appropriate stakeholders?

The Performance appraisal reports of the stakeholders are reviewed by the heads of the department, Principal, and Management Committee.

➢ The Institution provides opportunity to improve the performance of the faculty through proper guidance and suggestions.

➢ The Institution continuously encourages the faculty with promotions, increments and other incentives for outstanding performances.

➢ The performance of the students is conveyed to their parents through progress report.

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?

- ➢ Employees Provident Fund for staff in the Institution.
- ➢ Free Transport for staff members.
- ➢ Group Mediclaim Insurance for staff members and their spouses and children.
- ➢ Incentives for Research Project, Publications, and Innovative Projects.
- ➢ Privilege Leave (PL): All staff is eligible for 10 days of PL for special assignments and 20 days of additional PL in lieu of the summer vacation foregone.
- ➢ Maternity Leave (ML): The Institute permits ML of 12 weeks, to be availed at the convenience of the mother-to-be.
- ➢ Academic Leave (AL): All teaching faculty is eligible for academic leaves for pursuing higher education.

6.3.6 What are the measures taken by the Institution for attracting and retaining eminent faculty?

The institution attracts and retain eminent faculty by

- ➢ Attractive pay scale.
- ➢ Sponsorship for higher studies.
- ➢ Academic leaves for pursuing higher degrees.
- ➢ Providing opportunities for attending conferences in various reputed institutions.
- ➢ Creating a transparent and professional environment to grow with the institution.
- ➢ Family like environment between faculty and management.

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?

The financial resources of the college are managed in a very effective manner.

- ➢ Annual Budget for the institution is prepared at the beginning of the year, by considering the possible income and expenditure involved. It is approved in the GB meeting.
- ➢ Institution purchase committee carefully scrutinizes and allocates required funds to each department after acquiring proposals from all the departments regarding their requirements for academic year.

- ➢ All transactions are supported by vouchers.
- ➢ All bills/invoices/vouchers are scrutinized by account staff and approved by the administrative officer.
- ➢ The bill payments are passed after ensuring proper verification/evaluation of the items. Only duly authorized persons operate the transactions through the bank.
- ➢ Audited financial statements including Income and Expenditure Account, Balance Sheet etc. are prepared by qualified auditors and submitted to banks and other regulatory agencies.

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.

Internal audit will be conducted every year by the committees appointed by the management. The committees will submit their reports to the management for follow up action. Every year the institution accounts will be audited by the professional chartered accountant.

6.4.3 What are the major sources of institutional receipts/funding and how is the deficit managed? Provide audited income and expenditure statement of academic and administrative activities of the previous four years and the reserve fund/corpus available with Institutions, if any.

Major sources of income for the institution are Tuition fee, Transport fee and Hostel fee. Deficit is managed by the management committee.

6.4.4 Give details on the efforts made by the institution in securing additional funding and the utilization of the same (if any).

Additional funding is secured
- ➢ By conducting TCS online exams (like IBPS, RRB, IIT-JEE, etc)
- ➢ Through consultancy works.

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.

The Institution established an Internal Quality Assurance Cell (IQAC).

Composition of the IQAC

S.No	Name of the Member	Designation	Role of IQAC
1	Dr. V V Rama Reddy	Principal	Chairmanship
2	Mr. P. Madhusudana Rao	Chairman	Executive Member
3	Prof. K.V.Narasimham	Professor, S&H	Coordinator
4	Dr. M.Rajan Babu	Professor, ECE	Member
5	Dr. Y. Narendra Kumar	Professor, EEE	Member
6	Dr. S.Sri Kiran	Professor, ME	Member
7	Prof. A Rama Rao	Professor, CSE	Member
8	Dr. P.D.Sailaja	Professor, S &H	Member
9	Dr. G R S Murthy	Professor, CSE	Member
10	Dr. Satish Pujari	Professor, ME	Member
11	Dr B.Sridhar	Professor, ECE	Member
12	Mr. B.T.Rama Krishana Rao	Associate Professor, EEE	Member
13	Mr. G Dileep Kumar	Software Engineer, INFOSYS, Bangalore.	Alumni
14	Sri P S R Vara Prasad	F/o P.Manojna	Parent
15	Mr.Ch Sai Ram	15KD5A0210	Student
16	Mr K Ravichandra	Industry Person(Tech Mahindra)	Stakeholder
17	Mr. V S Kiran Babu	Academician and Rotary Club Member	Local Society

The institutional policy with regard to quality assurance is:

➢ To develop a system for conscious, consistent and catalytic action to improve the academic and administrative performance of the institution.

➢ To promote measures for institutional functioning towards quality enhancement through internalization of quality culture and institutionalization of best practices.

IQAC shall evolve Mechanisms and procedures for

➢ Ensuring timely, efficient and progressive performance of academic, administrative and financial tasks.

➢ The relevance and quality of academic and research programs.

➢ Optimization and integration of modern methods of teaching and learning;

➢ The credibility of evaluation procedures.

➢ Ensuring the adequacy, maintenance and proper allocation of support structure and services.

➢ Sharing of research findings and networking with other institutions in India and abroad.

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.

c. Does the IQAC have external members on its committee? If so, mention any significant contribution made by them.

YES. The external members in IQAC are Parent, Student, Stakeholder, Local Society.

d. How do students and alumni contribute to the effective functioning of the IQAC?

Student and Alumni nominee contributes for the enrichment and development of the quality of education by associating and involving in nurturing professional, academic relations with the institution. They contribute to the various decisions taken in the IQAC for betterment of campus facility and content of the academics along with delivery systems. They share the knowledge with IQAC about the Institutional

procedures and industry expectations. Alumni Association has come forwarded to support in quality improvement of students by concreting the relationship between industries and the college.

e. **How does the IQAC communicate and engage staff from different constituents of the institution?**

The role of the coordinator of the IQAC is crucial in ensuring the effective functioning of all the members of IQAC. The IQAC is constituted of different sub committees that are involved in planning and implementing the decisions of IQAC. IQAC communicates its planning and decision to staff through circulars.

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 operationalisation.

Yes. The administration is decentralized and is effectively carried out as per quality policy aligned 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, the faculty is provided with training programs and workshops related to quality assurance procedures.

6.5.4   Does the institution undertake Academic Audit or other external review of the academic provisions? If 'yes', how are the outcomes used to improve the institutional activities?

The academic audit is conducted by Program Committee in department level and IQAC in college level on the various aspects like Course files, Manuals, Monthly attendance of students, Internal marks, Semester exam marks, Training programs to students, Faculty development programs and Co-curricular and extra-curricular activities to improve the Institutional activities.

6.5.5   How are the internal quality assurance mechanisms aligned with the requirements of the relevant external quality assurance agencies/regulatory authorities?

The internal quality assurance mechanisms are designed keeping in view the

requirements of external quality assurance agencies and 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?

➢ Annual reviews are conducted by the Principal and heads of the department on detailed self-appraisal forms of the faculty to assess the teaching methodologies adopted by the faculty.

➢ Heads of the department reviews lesson plans, course material, assignments, question papers prepared by the faculty and the extent of syllabus coverage and also the quality of teaching.

➢ Based on the reviews, necessary suggestions are made to the faculty to make the teaching learning more effective.

➢ The head of the Institution interacts with few students of each class and takes the feedback to enhance teaching learning process.

6.5.7 How does the institution communicate its quality assurance policies, mechanisms and outcomes to the various internal and external stakeholders?

➢ Institution and all disciplines Vision, Mission and Quality Assurance policy of the college are placed on the website.

➢ Vision and Mission statements are displayed on boards at prominent places in campus and on website.

➢ Vision, Mission and quality assurance mechanisms are incorporated in the magazine.

➢ Quality Assurance mechanisms and outcomes are informed to all students in induction program, students mentoring sessions, parents meetings, alumni meetings, Principal's address at seminars/ conferences/ interactive sessions with stakeholders etc.

CRITERIA VII: INNOVATIONS AND BEST PRACTICES

7.1 Environment Consciousness

Faculty and student community of the Institution are committed to environmental safety and protection by adopting practices of green revolution in and around the campus, waste reduction and energy conservation etc. Our strategic plans of development are focused towards safeguarding nature and 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 has a conscious of its responsibility to protect the environment by conducting Green Audit of the campus - As a part of that, Institution maintains a checklist of the following activities undertaken in connection with Green Audit:

➢ Optimum Consumption and utilization of energy in the campus as an activity of Energy Saving Club.

➢ Service records pertaining to waste materials/condemned equipment are maintained from regularly. Sustainability principles, practices and Environmental Studies are an integrated into Curriculum.

➢ The NSS team is striving continuously to maintain an eco-friendly green environment in the campus as well as nearby villages by adopting them and conducting some awareness programs.

➢ A continuously greenery monitoring is in the place.

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

a) Energy conservation

As a part of energy conservation following initiatives is under practice:

➢ Load scheduling is one of the our best practice in the institution to reduce the peak demand on the grid. As a part of it the laboratories are staggered and lab in charge follows the instruction in spirit of conservation energy as per the suggestion of Energy Saving Club.

➢ CFL and LED lamps are used and old bulbs are replaced with only CFL/LED as needed.

- Proper ventilation is provided to reduce the power consumption to take advantage of natural light.
- Slogan like "*Save Energy and Conserve Energy"* and *" one unit of energy save is equal to two units of generated*" are displayed across the campus.
- All the equipment in the labs is serviced periodically to reduce excessive consumption of power.
- Class rooms are always instructed to keep the windows open to take advantage of the natural light.

b) Use of renewable energy:

The Institution is exercising the proposal of setup of solar power plant of capacity up to 100 KW which is an alternative energy source.

c) Water harvesting:

In order to harvest rain water, the institution has rain water harvesting pits are constructed. These pits collect the rain water and improved water level.

d) Efforts for Carbon neutrality

- A Big garden with capacity 10,400 sq.m is operational which is planted with various plants the helps to have carbon neutrality.
- Eco-friendly generators have been set up in the campus away from main buildings to minimize the atmospheric pollution.
- The Management has constructed vehicles parking facilities which are away from the class rooms and labs.
- Instead of burning waste from plants and trees they are being converted in to compost and used as manure for the plants, in turn reducing atmospheric pollution.

e) Plantation/Greening Drives

- The Institution takes the responsibility of increasing Green Cover in and around the campus.
- Lawns are prepared and maintained across the campus.
- Environmental day was celebrated on 5th June of every year. Management, faculty

and students plant saplings on this occasion.

➢ The institution under its NSS Unit organizes plantation programs within the campus and around the nearby villages.

➢ The Institution takes every major event as an opportunity to plant stapling.

f) Hazardous waste management

The usage of hazardous material is negligible in the institution.

g) e-Waste Management

➢ Some of the e-waste generated is used for technical education purpose by making use of hardware in laboratories for display and study. Some of the components are being used for demonstration purposes.

➢ Condemned batteries are disposed through outside agencies.

7.2. Innovations

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

Innovative Practices in the Institution:

➢ *Outcome Based Education (OBE) approach* is implemented in teaching and evaluation using Revised Blooms Taxonomy to develop students' self learning.

➢ Value additions in the form of *Content beyond syllabus* to align the industry academic needs.

➢ Web 2.0 tools *Socrative, Edmodo* are used for revolutionary learning of language communication.

➢ Programming skill enhancement through Code Tantra platform to attempt code competitions like IBM's The Great Mind Challenge (TGMC) and TCS's Code vita.

➢ *Digi Phrase,* an Interface, used for evaluation of Paragraph Writing and Picture Perception Discussion Tests developed by department of CSE..

➢ E-Z School office automation is used for Software for obtaining quick information and Bio-Metric system employed for attendance.

➢ *Alumni Video Conferencing* through *Skype, Hangout, Whatsapp* to have a liaison between the campus and Industry.

➢ *Smart Class room concept* (a student centric learning driven by students) for

enhancement of collaborative learning.

➢ *Online Feedback mechanism* for unbiased responses in continuous quality improvement.

➢ *Student teacher adoption* for continuous counseling and motivation.

➢ *One minute Visume (Video Resume)* for entering the National Talent pool to grab the job opportunities.

➢ *Posting of activities on You Tube* for peer reviews and likes to stimulate communicative vein.

➢ *Online interface* in the Labs is used in place of *Viva-Voce* to bait the students in acquisition of skills.

➢ Common Booklet for both the descriptive mid-term examinations for tracking the performance of students at a time.

➢ Providing for Student In and out barcode checkout system at Main gate of the campus.

➢ Digital Check in and Checkout system at Library developed by students.

➢ Various Clubs are for creative practices E-Plus Club for Communication Development, Mother Teresa Club for charity activities, Faraday club for innovations, Photography Club for hobby persuasion. Engineers, and Without Borders (EWB) platform for service through technology.

➢ A custom of celebrating New Year/Pongal etc., through message oriented Cultural Programmes entitled *Nirantra Desabhakthi Geethalaapana* (Non-stop singing on patriotic songs)*, Nirantara Nritya Geethika*(Non-stop dancing), *Vinodam-Sandesam* (Comedy- Message) etc.

7.3 Best Practices

Best Practice - I

Title: "Encouragement to Faculty for Pursuing Ph. D and Research Publications"

Goal of this practice:

The institution encourages faculty to pursue their Ph.Ds at institutes of repute by giving financial assistance and academic leaves to overcome scarcity of faculty having doctoral degrees. This has resulted in cultivating research culture, quality publications and enhanced teaching learning process.

The main objective of this practice is to motivate the faculty for active involvement in

research and to contribute for the overall development of the institution.

The Context:

In the initial stages of the Institution, there was a dearth of faculty having Doctoral Degrees.

The Practice:

➢ Encouraging faculty to register for Ph.D Programs at reputed institutes like IITs, NITs, Government Universities etc.

➢ For Registered candidates, the Institution provides Academic leaves with financial assistance for attending Ph.D course work.

➢ Academic Leaves are sanctioned time to time for carrying out research discussions.

➢ Sponsoring faculty members to various Workshops, National and International Conferences/Seminars in India and Abroad by providing necessary support.

➢ At the submission stage of Ph.D, an academic leave is sanctioned up to six months.

➢ After acquiring the Ph.D degrees a substantial hike is given in the pay package.

➢ Incentives for Research Publications in Reputed Journals.

➢ In-house research funding is provided for the promotion of R&D.

Evidence of Success:

After exercising this practice, the number of Ph.Ds are increased from One to 16 and 36 faculty are pursuing Ph.D.

List of Faculty Members Benefited.

S.No	Details	No. of Faculty Benefited
1	No. of Faculty Registered for Ph.D Programs	20
2	No. of Faculty availed/availing Academic Leaves for Ph.D course work	23
3	No. of Faculty participated in Workshops/Conferences/Seminars	82
4	No. of Faculty availed/availing Academic Leaves for research discussions	34
5	No. of Faculty availed/availing Academic leave at the submission stage of Ph.D	13
6	No. of Faculty awarded Ph.D degrees	12
7	Number of Research Publications in Last four years	325

Problems Encountered & Resources Required:

➢ The major problem encountered is the pre requisite of minimum experience to register for Ph.D.

➢ Limited number of seats available in the universities to register.

➢ Additional budget allocation in order to meet the expenses during the implementation of this practice.

<div align="center">

Best Practice II

Title: "Skill enhancement through Mentoring System to develop Social relevance projects"

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Goal of this Practice:

Goal of this practice includes motivating the students to enhance their knowledge and skill levels through mentoring system, in turn to develop social relevance projects that enable them to become industry ready.

The Context:

Most of the students joining our institution hail from rural background and from vernacular medium of study. It has become a major challenge to transform them into self sustained engineers.

The Practice:

Various activities under this practice are:

➢ A teacher-student adoption is to drive the performers towards excellence and slow learners to reach the minimum qualifying level.

➢ Students are mentored to maintain good track record of academics by encouraging them to be abreast of latest technological developments.

➢ Imparting practical exposure to students in latest technologies by arranging industrial visits/in-plant trainings.

➢ Conducting workshops, guest lectures and seminars by eminent academicians from premier institutions and Industry Experts.

➢ In order to transform students into tomorrow's potential leaders of the society, various personality development and soft skill training programs are conducted.

➢ A continuous encouragement for students to come up with innovative ideas related to societal issues.

➢ Students are allowed to share their ideas with outside world by allowing them to present papers at various National / International conferences.

Evidence of Success:

As a result of this practice, a discernible positive change has been observed in the morale of the students in addition to few of the outcomes listed below:

- More than 85% of pass percentage is maintained consistently.
- Social relevance projects like mini agriculture harvester, Smart Gamela, GSM Based Solar Irrigation System, Wastebin Monitoring System using GSM Technology, Suraksha App for Women Protection, Multi Nut remover and tightener, Power assisted screw jack, Swing Electric Power Generation, Manual Plough, Solar Car (under construction).
- Acquisition of skill enablement and consistent increase in the placement track is profoundly observed.

Problems Encountered: As technologies are rapidly changing, it has become difficult for the institution to incorporate all those rapid changes in the process of skill development.

Resources Required: Provision is made in the Budgetary Allocations to arrange training programs.

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Best Practice III

Title: "Education through Community Service"

</div>

Goal of this Practice:

Encouraging the students to involve in community service for inculcating social responsibility, leadership and organizational skills among them.

The Context

As the Institution is at a modest rural setting, students are expected to address the community problems like alcoholism, illiteracy, child labour, Open Defecation, Child Marriages etc in order to inculcate social responsibility.

The Practice

To inculcate the social responsibility, leadership and organizational skill among students, following are some of the practices:

- The Institution has adopted a few villages nearby campus for rural development by addressing the problems with technological solutions.
- Several social service camps are organized periodically in the adopted villages by involving students to understand the ethos of rural life and its problems through surveys.
- Visiting Orphanages, Oldage Homes is a regular practice to inculcate human values.
- Plantation, Blood Donation Camps, Rain Harvesting Pits, Health Camps and Awareness Rallies on various social stigmas.

- As part of *Digital India*, activities on e-banking, internet usage, Aadhaar and Vote Franchise enrolment are taken place.
- Skill development Programmes like House Wiring, Fan Winding, Computer Literacy are conducted.
- As part of Swachh Bharath initiative, awareness on problems of Open Defecation, clean and green programmes are conducted.
- Fund raising activities like fund for eradication of Polio, establishment of Library at D. Tallavalasa village.

Evidence of Success

The following are some of the appreciations are for activities undertaken:

- An Appreciation from District collector Vizainagaram as Best Institution for conducting Blood donation camps in 2011.
- Best Institution award from JNTUK for conducting service camps in the villages in 2012
- An Appreciation Certificate from District Collector for the committed service rendered in Sankranthi Sambaraalu in 2017
- An Appreciation Certificate from District Collector for the committed service rendered in Vizianagara Utsavaalu in 2016
- An appreciation certificate is given by Govt. of AP to Akulapeta Village a hamlet of our adopted village D. Tallavalasa for the initiatives of Open Defecation Free.

Problems Encountered

- Initially, a resistance is found among villagers in accepting the students to serve them. Later after the students heartfelt involvement made them to unite both the counterparts to have mutual benefits.

Resources

- The Management itself has met the financial needs for the attainment of the goals in this practice as a social responsibility. Sometimes, the students and staff of the Institution have also come forward to support the wise mission of management.

Student Innovation
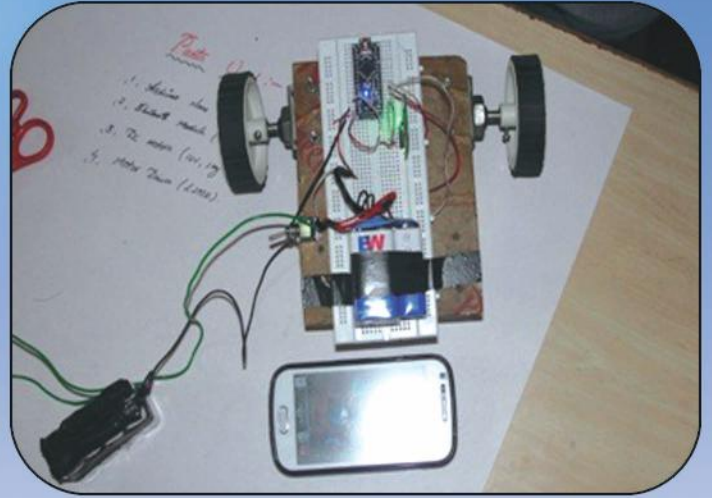
Student Innovation

Student Innovation

**Waste Bin Monitoring System
Using GSM Technology**

GSM Based Solar Irrigation System

Plantation

PART - E
EVALUATIVE REPORT OF DEPARTMENTS

Evaluative Report of the Computer Science and Engineering

1**. Name of the Department**: Computer Science and Engineering

2. **Year of Establishment** : 2008

3**. Names of Programmes / Courses offered (UG, PG)**

Names of Programme	Courses offered	Year of Starting	Sanctioned Intake	
			Year	Intake
B.Tech	Computer Science and Engineering	2008	2008	60
			2010	120
			2014	180
			2015	180
			2016	180
M.Tech	Computer Science and Engineering	2014	2014	18

4.Names of Interdisciplinary Courses and Departments Involved

Year & Sem	Interdisciplinary Courses	No. Of Courses	Departments Involved
I-I	English –I	01	S&H
	Mathematics-I	01	S&H
	Mathematics-II (Mathematical Methods)	01	S&H
	Applied Physics	01	S&H
	Engineering Drawing	01	ME
	English Communication Skills lab – I	01	S&H
	Applied/Engineering Physics Lab	01	S&H
	Applied/Engineering Physics - Virtual Labs Assignments	01	S&H
I-II	English –II	01	S&H
	Mathematics-III	01	S&H
	Applied Chemistry	01	S&H
	Environmental Studies	01	S&H
	Engineering Mechanics	01	ME
	Applied / Engineering Chemistry Laboratory	01	S&H
	English - Communication Skills Lab – II	01	S&H
II-I	Digital Logic Design	01	ECE
	Digital Logic Design Lab – II	01	ECE
II-II	Probability and Statistics	01	S&H
III-I	Data Communication	01	ECE

5. Annual/ Semester/Choice Based Credit System Semester Based Credit System

Names of Programmes	Year	Semester	Credits
B.Tech.(Computer Science and Engineering)	1	1	24
		2	24
	2	1	22
		2	21
	3	1	22
		2	23
	4	1	23
		2	21
M.Tech (Computer Science and Engineering)	1	1	20
		2	20
	2	1	20
	2	2	20

6. Participation of the department in the courses offered by other departments

Name of the Department	Subject Code & Subject Name	Year	No. Of Faculty Members Allotted
S&H	OOPS Through C++	I-II	02
	Data Structures	I-II	02
ECE	Data structures	II - I	02
	Computer architecture and organization	IV – I	01
EEE	Unix &Shell Programming	IV-II	01
ME	Interactive Computer Graphics	III-II	01

7. Courses in collaboration with other universities, industries, Foreign institutions, etc.:
NIL

8. Details of courses/programmes discontinued (if any) with reasons: NIL

9. Number of teaching posts sanctioned and filled (Professors/Associate Professors/Asst. Professors)

Teaching Staff	Sanctioned	Filled
Professor	3	3
Associate Professors	13	13
Asst. Professors	24	24

10. Faculty profile with name, qualification, designation, specialization D.Sc./D.Litt./ Ph.D./M.Phil., etc.

S. No	Name	Qualification	Designation	Specialization	No of Years of Experience	No. of Ph.D. students guided in the last 4 years	
						Guiding	Guided
1	Prof. Adimalla Rama Rao	M.Tech.,M.I. S.T.E , (Ph.D)	Professor, HOD	Mobile Adhoc Networks	16	--	--
2	Dr.G R S Murthy	M.Tech, Ph.D	Professor	Image Processing, Computer Vision	23	--	--
3	Dr.K.Jaya Sri	M.Tech, Ph.D	Professor	Software Engineering	10	--	--
4	Mr.G.Prakash Babu	MCA,MBA	Associate Professor	Computer Science & Engineering	14	--	--
5	Mr.G Sateesh	M.Tech, (Ph.D)	Associate Professor	Wireless Sensor Networks	13	--	--
6	Mr. D. Madhu Babu	M.Tech (Ph. D)	Associate Professor	Data Mining , Pattern Recognition	11	--	--
7	Mrs.Sadhana K	M.Tech, (Ph.D)	Associate Professor	Data Mining And Big Data	10	--	--
8	Mr.A.Yugandhara Rao	M.Tech.,	Associate Professor	Computer Science & Engineering	10	--	--
9	Mr.B Nageswara Rao	M.Tech.	Associate Professor	Computer Science & Engineering	10	--	--
10	Mr.A.Rama Krishna	M.Tech.	Associate. Professor	Wireless Sensor Networks	10	--	--
11	Mr.Uma Shankar	MCA	Associate Professor	Computer Science & Engineering	10	--	--
12	Mrs.G. V. M. Vasuki	M.Tech.	Associate Professor	Computer Science & Engineering	9	--	--
13	Mr. P.Jagannadha Varma	M.Tech.	Associate Professor	Data Structures, Artificial Intelligence	9	--	--
14	Ms. R. Suchitra	M.Tech.	Associate Professor	Computer Science And Engineering	8	--	--
15	Mr U. Kartheek Chandra Patnaik	M.Tech.	Associate Professor	Big Data And Analytics	8	--	--
16	Mr.V.Anji Reddy	M.Tech.	Associate	Computer	8	--	--

			Professor	Networks, MANETS			
17	Mr B.A.Swamy	M.Tech.	Assistant Professor	Mobile Ad Hoc Network	8	--	--
18	Mr.Shaik Nagul	M.Tech,(Ph.D)	Assistant Professor	Computer Science & Engineering	7	--	--
19	Mr. P. Samba Siva Rao	M.Tech.	Assistant Professor	Computer Networks	6	--	--
20	Ms. K.Usha Rani	M.Tech.	Assistant Professor	Computer Science And Technology	5	--	--
21	Mrs.B. Sailaja	M.Tech.	Assistant Professor	Computer Science & Engineering	5	--	--
22	Mrs.M.Swetha	M.Tech.	Assistant Professor	Computer Science & Engineering	5	--	--
23	Mrs.R Pavani	M.Tech.	Assistant Professor	Computer Science & Engineering	4	--	--
24	Ms.G.Mutyalamma	M.Tech.	Assistant Professor	Computer Science And Technology	4	--	--
25	Mr.P. Srinivasa Rao	M.Tech.	Assistant Professor	Computer Science & Engineering	4	--	--
26	Mrs.M. Pavani	M.Tech.,	Assistant Professor	Computer Science & Technology	2	--	--
27	Mr.Lokesh Sirela	M.Tech	Assistant Professor	Computer Science & Engineering	2	--	--
28	Ms.G.Hymavathi	M.Tech.	Assistant. Professor	Computer Science & Engineering	2	--	--
29	Mrs. P.Ramya	M.Tech.	Assistant Professor	Computer Networks And Information Security	1	--	--
30	Ms.K Lavanya	M.Tech.	Assistant Professor	CST	1	--	--
31	Ms.K. Suneeta	M.Tech.	Assistant Professor	Cyber Security	1	--	--
32	Mr.P.Ganesh	M.Tech.	Assistant Professor	Computer Science & Engineering	1	--	--
33	Mr.V.V.S. Sasank	M.Tech.	Assistant.	Data Mining	1	--	--

			Professor				
34	Ms.Bulah	M.Tech.	Assistant. Professor	Computer Science & Engineering	1	--	--
35	Ms V.Mounika Revathi	M.Tech.	Assistant. Professor	Computer Science & Engineering	1	--	--
36	Mr.Vepala Raveendra	M.Tech.	Assistant. Professor	Computer Science & Engineering	1	--	--
37	Ms.Karanika Supriya	M.Tech.	Assistant. Professor	Computer Science & Engineering	1	--	--
38	Ms.Madala Jayashree	M.Tech.	Assistant. Professor	Computer Science & Engineering	1	--	--
39	Mr.Vemali Chaitanya Babu	M.Tech.	Assistant. Professor	Computer Science & Engineering	1	--	--
40	Mrs.S.Anusha	M.Tech.	Assistant. Professor	Computer Science & Engineering	1	--	--

11. List of senior visiting faculty: NIL

12. Percentage of classes taken by temporary faculty – Programme-wise information : NIL

13. Programme-wise Student Teacher Ratio: B.Tech : 15:1 M.Tech : 12:1

14. Number of academic support staff (technical) and administrative staff: sanctioned and filled

Non-Teaching Staff	Sanctioned	Filled
Administrative Staff	1	1
Technical	5	5

15. Qualifications of teaching faculty with DSc/D.Litt/ Ph.D/M.Phil/PG

PhD	Pursing PhD	M.Tech	MCA	Total
2	5	31	2	40

16. Number of faculty with ongoing projects from a) National B) International Funding Agencies and c) Total Grants Received. Mention Names of Funding Agencies and Grants Received Project-Wise: NIL

17. Departmental projects funded by DST-FIST; DBT, ICSSR, etc.; total grants received :

NIL

18 . Research Centre /Facility Recognized by the University: NIL

19. Publications(Last four years):

- Publication Per Faculty

	2016-17	2015-16	2014-15	2013-14
Number of Publications	05	16	19	29

S. No.	Name of the Faculty	Title of the Paper	Details of Publication			ISSN No	Impact Factor
			Name of the Journal	Vol. & Issue	Year		
1	Mr.A.Rama Rao	Exponential Genetic Algorithm-Based Stable and Load aware QoS Routing Protocal for MANET	JISYS	10(4) 5-14	2017	0334-1860	0.397
2	Mr.A.Rama Rao	A New Interference Aware Routing Metric for Efficient Load Balancing in 802.11s Networks	IJCSIT	7(6) 2422-2427	2017	1473-1476	3.32
3	Mr.D Madhu Babu	A New Approach For Information Collection From Web With Ontology	IJAER	11(9) 6563-6567	2017	0973-4562	--
4	Mr.A Yugandhara Rao	A Novel approach to provide security for the digital data by using reversible texture synthesis	IJCA	5(6) 122-134	2017	2250-1797	3.12
5	Mr.A Anji Reddy	A New Interference Aware Routing Metric for Efficient Load Balancing in 802.11s Networks	IJCSIT	7(6) 2422-2427	2017	1473-1476	3.32
6	Mr.A.Rama Rao	Genetic algorithm based Backup Route Establishment for QoS Routing	IJIES	10 (3) 38-46	2016	2185-3118	
7	Mr.A.Rama Rao	Efficient Local Route Mechanism for AODV Protocol in MANETS	IJRITCC	4(3) 317-321	2016	2321-8169	5.837
8	Mr.A.Rama Rao	Advanced Traffic Management with BOT Detection and GEO-Location Monitoring	IJIR	2(5) 1824-1828	2016	2454-1362	3.75
9	Mr.G. Sateesh	Comparative Study of Sink Node Placement Strategies of Wireless Sensor Networks	IJRITCC	4(3) 304-309	2016	2321-8169	5.837
10	Mr.G. Sateesh	Assured Data Communication using Cryptography and Stenography	IJLTEMAS	5(3) 102-106	2016	2278-2540	2.115
11	Mr.U. Kartheek	Identity Authentication and Entity Resolution for BIG-Data	TECHCRONICLE	1(6) 96-101	2016	2454-1958	--
12	Mrs.K. Sadhana	Platform Invocation Services using Virtual Machines	IJAIR	5(3) 106-	2016	2278-7844	0.349

				108			
13	Mr.P J Varma	Travel Strategy Prediction Using API's in AI	IJAIR	5(3) 205-208	2016	2278-7844	0.349
14	Mr.A.Yugandhara Rao	Key Aggregate Cryptosystem for Scalable data Sharing in Cloud Storage	IJARCST	4(2) 142-144	2016	2347-9817	2.017
15	Ms.Suchitra.R	Secure Data Transmission using Adaptive Audio Steganographic Technique	IJIR	2(6) 262-264	2016	2454-1362	3.75
16	Mrs.GVM Vasuki	Efficient Searching of Popular Artifacts using Mobile Cloud	IJIR	2(5) 139-142	2016	2454-1362	3.75
17	Mr.B. A Swamy	Providing Trust as a Service By Feedback Analysis to Cloud Services	IJAIR	5(3) 160-162	2016	2278-7844	0.349
18	Mrs.B. Sailaja	Latency Measurement Using Lossy Difference Aggregator	IJAIR	5(3) 349-351	2016	2278-7844	0.349
19	Ms.N.Suneetha	Secure Image Encryption based on DNA Algorithm	IJAIR	5(3) 283-286	2016	2278-7844	0.349
20	Mr. S.K Nagul	Predictive Analytics for Power Consumption in Home appliances Using Computational Intelligence	IJAIR	5-4	2016	2278-7844	0.349
21	Mr.P.Sambasiva Rao	Text processing using SVM	IJAIR	5(3) 301-303	2016	2278-7844	0.349
22	Mr.A.Rama Rao	Performance Evaluation of AODV and DSDV Routing Protocols through clustering in MANETS	IJSER	6(3), 1464-1470	2015	2347-3878	3.8
23	Mr.G. Sateesh	Placement of Sinks in Wireless Sensor Networks	IJCSITR	3(1), 340-346	2015	2348-1196	
24	Mr.D.Madhu Babu	Vehicle Tracking using Number Plate Recognition System	IJCSIT	6(2), 1473-1476	2015	1473-1476	3.32
25	Mr.A.Yugandhara Rao	A Primitive Way of User Authentication using Color Scheme	IJAIEM	4(3) 220-223	2015	2319-4847	4.015
26	Mr.A.Yugandhara Rao	Intentional Data Extraction from Digital Media using Spread Spectrum	IJERM	2(3) 62-65	2015	2349-2058	2.37
27	Mr.B. Nageswara Rao	Improvement in Traffic Engineering using MPLS-TE	IJETR	3-3 107-112	2015	2321-0869	0.997

28	Mrs.G.V.M, Vasuki	Performance Evaluation of Transmission Control Protocol in Mobile Adhoc Networks	IJCSIT	3(1) 377-382	2015	2348-1196	3.32
29	Mrs.G.V.M. Vasuki	Cluster Based Routing Protocol in Heterogeneous Wireless Sensor Networks	IJAIR	3(4) 139-142	2015	2278-7844	0.349
30	Mr.P.J.Varma	Energy Based Analysis of Routing Protocols in Mobile Adhoc Networks	IJCSITR	3(2) 49-53	2015	2348-1196	
31	Mr.P.J.Varma	Enhanced ARM with Security using Two Keyword Play Fair Cipher	IJARCSSE	5(3) 340-344	2015	2277-128X	2.5
32	Mr.U.Kartheek	Empowering Service Claims Fraudulent using Big Data Analytics	IJCSIT	6(2) 1350-53	2015	0975-9646	3.32
33	Mr.V.Anji Reddy	Vehicular Adhoc Networks Analysis in Network Layer	IJETR	3(3) 320-323	2015	2321-0869	0.997
34	Ms.R.Suchitra	Location Based Online Blood Banking System	IJMITE	3(4) 1-4	2015	2348-0513	1.5429
35	Mr.P.Samba Siva Rao	Improving Security of Mobile Banking Application using Stegonography	IJAIR,	4(3) 175-176	2015	2278-7844	0.349
36	Mr. B.A.Swamy	Scheming Packet Loss via Tokens in the Frontier of the Network	IJCTT	2(2) 81-84	2015	2231-2803	1.494
37	Mrs.M.Swathi	Collective Information Profiling of Companies using CBIR	IJETR	3(3) 206-208	2015	2321-0869	0.997
38	Ms. D.M.S.Madhuri	Text Hiding using RSA and Blowfish Algorithms with Hash-based LSB Technique	IJMITE	3(4) 5-12	2015	2348-0513	1.5429
39	Ms.K.Usha Rani	Nearest Search Keyword based on Geometric Properties using Spatial Inverted Index	IJARCSSE	5(3) 388-390	2015	2277-128X	2.5
40	Mrs.M.Pavani	Fuzzy Based Clustering of High Dimensional Data Sets	IJCSIT	6(2) 1518-1520	2015	0975-9646	3.32
41	Mr.A.Rama Rao	A secure health care application architecture for integrating WSNs with cloud computing	IJERT	3(2) 2307-2310	2014	2278-0181	1.76
42	Mr.A.Rama Rao	Performance evaluation of DSR,AOMDV &ZRP routing protocols in Manets by using NS-2	IJERT	3(2), 461-466	2014	2278-0181	1.76
43	Mr.K.Suresh Babu	Enhanced Incremental Clustering of time-series by fuzzy clustering	IJCSIT	5(1), 918-920	2014	0975-9646	3.32

44	Mr.P.Kalyan Chakravarthy	Android based safety triggering application	IJCSIT	5(1) 646-647	2014	0975-9646	3.32
45	Mr.P.Kalyan Chakravarthy	Plagiarism Detecting considering frequent senses using graph based research document clustering	IJCSIT	5(1) 789-791	2014	0975-9646	3.32
46	Mr.P.J.Varma	Association Rule Mining with security based on playfair cipher technique	IJCSIT	5(1) 744-749	2014	0975-9646	3.32
47	Mr. D.Madhu Babu	Performance evolution of routing protocols (DSR,DSDV,ZRP) mobile adhoc networks (MANET) by using NS-2	IJERT	3(2) 461-464	2014	2278-0181	1.76
48	Mr.D.Madhu Babu	Image based fraud prevention	IJCSIT	5(1) 728-731	2014	0975-9646:	3.32
49	Mrs.M.Swathi	Research caricature based on semantic web mining	IJETAE	4(2) 201-204	2014	2250-2459	4.027
50	Mrs.M.Swathi	A relative analysis of MANET routing protocols DSDV & AOMDV using NS2	IJAIEM	3(1)	2014	2319-4847	3.115
51	Mrs.M.Swathi	Implementing & comparison of MANET routing protocols using NS-2	IJETAE	6(2) 1-8	2014	2250-2459	4.027
52	MrV.Anji Reddy	Mobility Management Approaches for Mobile IP Networks	IJCSIT	5(2) 975-977	2014	0975-9646	3.32
53	Mr. V.Anji Reddy	Performance evaluation of AODV & ZRP routing protocols in mobile ad-hoc networks	IJERT	2(2) 237-243	2014	2321-8843	1.17
54	Mr.A.Yugandhara Rao	Distributed streaming with Network Diversity	IJRTE	2(6) 86-88	2014	2277-3878	1.109
55	Mr.P.Samba Siva Rao	Detecting of Routing Misbehavior nodes using Improved 2-ack in MANETS(simulation through NS-2)	IJCSIT	5(2) 1042-1044	2014	0975-9646	3.32
56	Mr.B. Joshua	A Frame work to refine Awful Tweets from e-Networks	IJCSIT	5(1) 740-743	2014	0975-9646	3.32
57	Mr.B. Joshua	Intrusion detection in wireless sensor network using random sensors by implementing DES algorithm	IJCSIT	5(1) 760-762	2014	0975-9646	3.32
58	Mr.B.	Performance analysis of routing	IJCSIT	5(1)	2014	0975-	3.32

	Nageswara Rao	protocols mobile adhoc networks (MANET) by using NS-2(network simulation)		724-727		9646	
59	Mr.B. Nageswara Rao	Implementation on Document Clustering using Correlation Preserving Indexing	IJCSIT	5(1) 774-777	2014	0975-9646	3.32
60	MrR.Suchitra .	An Efficient Extension of Conditional Functions Dependencies in Distributed Databases	IJRET	2(3) 17-24	2014	2321-8843	1.962
61	Mr.R.Suchitra	An approach to store spatial big data using multi valued database	IJERT	2(3) 17-24	2014	2321-8843	1.962
62	Mr.R.Suchitra	An approach to store spatial big data using multi valued database	IJERT	2(3) 17-24	2014	ISSN: 2321-8843	1.76
63	Mr.R.Suchitra	Increasing comparison performance using k-harmonic mean	IJMITE	2(3) 11-17	2014	2348-0513	1.5429
64	Mr.G.V.M. Vasuki	A Novel approach for cloud integrated gateways	IJCSIT	5(1) 923-926	2014	0975-9646	3.32
65	Mr.G.V.M. Vasuki	Location Based Alarm System Depending on Logitude and Latitude	IJCSIT	5(1) 967-969	2014	0975-9646	3.32
66	Mr. K.Usha Rani	Host to Host congestion control using TCP enhanced Newreno	IJAIEM	3(1) 505-509	2014	2319-4847	3.115
67	Mr. T.Sumallika	Automatic user specific opinion extraction from online reviews	IJCSIT	5(1) 617-620	2014	:0975-9646	3.32
68	Mr. T.Sumallika	An efficient search of Imperceivable data in location – based services	IJERT	1(2)	2014	2278-0181	1.76
69	Mr. R.L Divakar	Scheduling the packets using Chromatic Graph coloring in Mesh Network using NS2	IJERT	3(1) 2364-2369	2014	2278-0181	1.76

- Number of papers published in peer reviewed journals (national / international) by faculty and students : 69(faculty),Students 55
- Number of Publications listed in International Date base   --- NIL ---
- Monographs   -- NIL –
- Chapter in Books Edited   -- NIL --
- Books with ISBN/ISSN Number with details of publishers -- NIL --
- Citation Index   -- NIL --
- SNIP   -- NIL --
- SJR   -- NIL --
- Impact Factor 69
- H Index   -- NIL --

20. Areas Of Consultancy And Income Generated

- Online Examinations for GATE, TCS-ION, AIEEE, Bank Promotional Exams
- Income generated: 8 Lakhs

21. Faculty as Members in

a)National committees b) International Committees c) Editorial Boards: NIL

22. Student Projects

- percentage of students who have done in-house projects including inter-departmental - **100%**
- percentage of students doing projects in collaboration with industries / institutes   -NIL-

23. Awards / Recognitions Received at The National And International Level by

- **Faculty**

S. No	Year	Name of the Faculty	Award/Recognition
1	2017	Mr.P.Jagannadha Varma	Guest of Honour for CSI APSSC at GIET, Rajahmundry.
2	2016	Mr.U.Kartheek Patnaik	Best Teacher Award By College
3	2015	Mr.V.Anjireddy	Best Teacher Award By College
4	2015	Dr G.R.S.Murthy	Chaired An IEEE Session At Csnt-2015
5	2015	Mr.P.Jagannadha Varma	National Level CSI Active Participation (Youth) Award Received By CSI
6	2015	Mr.P.Jagannadha Varma	Best Supporting SBC Award By CSI Visakhapatnam Chapter in 2015.
7	2014	Mr.A.Yugandhar Rao	Best Teacher Award By College
8	2013	Mr.P.J.Varma	Best Teacher Award By College

- **Students**

S. No	Year	Name of the Student	Award/Recognition
1	2017	D Ganesh and BV Alkesh	1st Prize in android app development at CSI APSSC at GIET, Rajahmundry.
2	2017	D Ganesh and G Sai Kumar	1st Prize in Project Expo at CSI APSSC at GIET, Rajahmundry.
3	2016	Mr.S.N.P.Bharadwaj & Mr.M.Vamsi Kiran	CSI best Student Awards by CSI, India
4	2016	Ms.Y.Saneetha	First Prize in Digital India celebrations by AP GOVT.
5	2016	Ms.P.Prathiba	First Prize in Digital India celebrations by AP GOVT.
6	2016	Ms. G.Mounica Rani	Certified in Cambridge English Lang. Assessment.
7	2016	Ms. A.Revathi	Certified in Cambridge English Lang. Assessment.
8	2016	Ms.V.Mythili & Mr.K.lakshman Rao	Achieved II-PRIZE in the event CURSORS-2K15 QUIZ at ANITS

9	2016	Ms.C.Harika & Mr.P.Vamsi Krishna Varma	Achieved I-PRIZE in IEI Student chapter Activities
10	2016	Ms.G.Indu Latha, Ms. Ch.Harsha Vardhini	First Prize in Paper Presentation at EPROBE-2016, ANITS,VSKP
11	2016	Mr.Sharat Tirumalaraju	First Prize in Paper Presentation at STEPCONE-16, GMRIT, Rajam
12	2015	Ms.M.Bhargavi Teja	Second Prize in paper presentation in CSI-2K15, Visakhapatnam
13	2015	Ms.B.Sowmya Devi	Project-Seond Prize Prathanaka-2015,Miracle College Vizianagaram.
14	2013	Mr. M.Srinivasa Rao	Second prize in paper presentation, Renewable Energy 2013, LIET,VZM
15	2013	Mr. G.Dileep Kumar	First Prize on Case study EWB meet BITS Goa.
16	2013	Mr. G.Dileep Kumar	Second Prize Paper Presentation E-Plus 2013,AIET, Narsipatnam

24. List of Eminent Academicians and Scientists / visitors to the Department :

S.No	Name of Academician/Scientist	Organization	Purpose	Date
1	Mr.Ch.Prasad	IIHT-Visakhapatnam	One Day Workshop	24th Dec, 2016
2.	Dr. R Marshall	Plymouth State University ,USA	Guest Lecture	6th Jan, 2016
3.	Dr. Vadlamani Ravi	IDRBT, Hyderabad	Guest Lecture	27th Feb, 2016
4.	Prof. D.V.L.N. Somayajulu	NIT-Warangal	6 Days FDP	16th - 21st June, 2016
5	Dr. R.B.V. Subhramanyam	NIT-Warangal	6 Days FDP	16th June, 2016
6	Mr.I.N.Murthy	Leva consulting, Banglore	6 Days FDP	17th – 18th June, 2016
7	Mr.Mithun Kumar	Predective Analytics, Banglore	6 Days FDP	20th – 21st June, 2016
8	Mr.I.Menhdi	Brain O Vision, Hyderabad	6 Days FDP	19th -21st Sept, 2016
9	Mr.P.C.Mahapatro	Steel Plant Project Director	State Level Student Convention CSI-2K15	17th Feb, 2015
10.	Prof.P.S.Avadhani	Vice-Principal, Andhra University	State Level Student Convention CSI-2K15	17th Feb, 2015
11	Mr.Nirmal Raj	Senior-HR, Rand Stand	State Level Student Convention	17th Feb, 2015

			CSI-2K15	
12	Dr.G.Jaya Suma	Professor	TAKSH-2K15	30st Dec, 2015
13	Mr. Satish Vallivetti	Advanced MINDS	Motivational Seminar	10th Oct, 2015
14	Mr.Savneet Singh Mr.Kunal Dudeja	Network Bulls in association with IIT-Delhi	Two day work shop	24th -25th Jan, 2014
15	Dr. Raj Kamal	M.I.S.T Engineering College,Indore	Guest Lecture	11st -12th July, 2014
16	Mr.L.VJ.Kishore	Director,Database Architecture,Guardian Insurance,USA	Guest Lecture	31st Dec, 2014
17	Mr.Amit Kumar Mr.Vimal Dixit Mr.Omesh Kumar Mr.Adarsh Kumar	Nex-G –Skills & Nex-G-Mobiltiy Divisions	5 Day Work Shop	27th -31st Dec, 2013
18	Mr.K.Viswanadham	Tech Mahendra Location Head	5Day Work Shop	27th -31st Dec, 2013
19	Mr.Ravi Chandra	Tech Mahendra-ADM	5Day Work Shop	27th -31st Dec, 2013
20	Prof.S.Pallam Setty	Andhra University	5Day Work Shop	27th -31st Dec, 2013

25. Seminars/ Conferences/Workshops Organized and the Source of Funding (National / International) with Details of Outstanding Participants, If any.

Academic Year	Date	Type of Event	Name of The Event	Name Of Resource Persons/Guests	Organizing Body/ Department	Source of Funding
2015-2016	24th Dec 2016	One day workshop	Cloud Computing	Mr.Ch.Prasad	CSE Department	Lendi
	19th – 21th Sep, 2016	3 day workshop	Android App Development	Mr.I.Menhdi	CSE Department	Lendi
	13th Aug 2016	One Day Student Centric Workshop	Web Designing	Mr.U.Virinchi, Mr.Ganesh	CSE Department	Lendi
	16th – 21th June, 2016	6 Days FDP	Analytics With R	Prof. D.V.L.N. Somayajulu	CSE Department	Lendi
2014-2015	24th – 25th Jan, 2014	Two day work shop	NNSC Work Shop	Mr.Savneet Singh Mr.Kunal Dudeja	CSE Department	Lendi

	31th Dec, 2014	One day Workshop	Big Data Analytics	Mr.L.V.J.Kishore	CSE Department	Lendi
	15th -16th Feb, 2015	CSI-2K15	State level student convention	Prof.P.S.Avadhani	CSE Department	Lendi
2013-2014	27th -31th Dec, 2013	5 Day Work Shop	"Simulation & Protocol Implementation using NS-2 for Wireless Technology	Mr.Amit Kumar Mr.Vimal Dixit Mr.Omesh Kumar Mr.Adarsh Kumar	CSE & ECE Departments	Lendi
	28th June 2013	One Day Workshop	Trends in J2ME & Android	Mr.U.Kartheek	CSE Department	Lendi

26. Student Profile Course-Wise:

Name of The Course	Batch	Appli Catio Ns Recei Ved	Number of Students Admitted		Pass Percentage
			Male	Female	
B.Tech	2012-2016	177	79	98	85.3
	2011-2015	158	62	96	94
	2010-2014	96	34	62	90.8
M .TECH	2013-2015	06	2	4	83.3

27. Diversity of Students

Name of The Course	% of Students From The College	% of Students From The State	% of Students From Other States	% Of Students From Other Countries
B.Tech	0	97	2	1
M.Tech(CS & E)	33.33	100	0	0

28. Students Have Cleared Civil Services, Defense Services, NET, SLET, GATE And Any Other Competitive Examinations?

Name of the Exam	2013-2014	2014-2015	2015-2016
GATE	2	2	2
CAT		2	

29. Student Progression

Batch	Student Progression	Eligible Students	No.of Students Progression	Percentage Against Enrolled
2015-2016	UG To PG	93	1	1.07
	PG To M.Phil.		0	0
	PG To Ph.D.		0	0
	Ph.D. To Post-Doctoral		0	0
	Employed Campus Selection		57	61.29
	Other Than Campus Recruitment		02	2.15
2014-2015	UG To PG	94	4	4.25
	PG To M.Phil.		0	0
	PG To Ph.D.		0	0
	Ph.D. To Post-Doctoral		0	0
	Employed Campus Selection		54	57.4
	Other Than Campus Recruitment		10	9.4
2013-2014	UG To PG	99	18	18.18
	PG To M.Phil.		0	0
	PG To Ph.D.		0	0
	Ph.D. To Post-Doctoral		0	0
	Employed Campus Selection		36	36.36
	Other Than Campus Recruitment		10	9.9

30. Present details about infrastructural facilities

a) Library
- Departmental Library is having text books and reference books for quick reference.
- Year wise project records are preserved for reference and knowledge enhancement.
- NPTEL video lectures.

b) Internet facilities for staff and students
- 35 Mbps from BSNL Leased Line

c) Total number of class rooms : 12

d) Class rooms with ICT facility : 03

e) Students' laboratories:

S.No.	Lab Desciption	No.Computers
1	Unix & Advanced Java Web Technology Lab	76
2	C Programming & It Work Shop Lab	65
3	OS.Java & DBMS Lab	68
4	DS & Project Lab	34
5	UMS & Multimedia Application Lab & Simulation Lab	70

Research Laboratories

Center for Advanced Research in computer Science was established in the current academic year to enhance the research activities in the Department.

f) Computers: 313, Server: 2, Printers: 5

31 Number of Students Receiving Financial Assistants College, University, Government or Other Agencies of the Department Getting Financial Assistance from College.

S. No	Academic Year	No. of Students Received Financial Assistance	Agency
1	2013-2017	1	Lendi
2	2015-2016	190	AP Government
3.	2014-2015	150	AP Government

32. Details On Student Enrichments Programmes(Special Lectures / Workshops/ Seminar)

Academic Year	Date	Speaker Name/Resource Person	Title
2015-2016	24th Dec, 2016	Mr.ChPrasad	One day workshop on Cloud Computing
	19th Sept, 2016	Mr.I.Menhdi	3- day workshop on Android App Development.
	13th Aug, 2016	Mr.U.Virinchi,Mr.Ganesh	One day workshop on Web Designing
	16th June, 2016	Prof. D.V.L.N. Somayajulu	Analytics With R
	27th Feb ,2016	Dr. Vadlamani Ravi	Evolutionary Computing Based Data Mining
	6th Jan, 2016	Dr. R Marshall	Software Engineering
2014-2015	24th Jan, 2014	Mr.Savneet Singh Mr.Kunal Dudeja	NNSC Work Shop
	31st, Dec, 2014	Mr.L.V.J.Kishore	Big Data Analytics
2013-2014	27th Dec, 2013	Mr Amit Kumar Mr Vimal Dixit Mr Omesh Kumar Mr Adarsh Kumar	"Simulation & Protocol Implementation using NS-2 for Wireless Technology"
	28th June,2013	Mr.U.Kartheek	Trends in J2ME & Android

33 .List the Teaching Methods Adopted by the Faculty for Different Programmes.

- ICT Tools
- Chalk and Board and PPT
- Conducting quiz in the topics completed
- NPTEL Lectures

34. Participation in Institutional social responsibilities (ISR) and extension activities

- Arrangement of Blood Donation Camps
- NSS Activities
- Tree Plantation Programs
- EWB,CSI Activities

35. **Detail any five Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department**

Strengths:
- Qualified and experienced faculty members.
- Good infrastructure
- Supportive management
- Successful track record in placements and academic results
- Providing e-resource learning for the students through E-Class Rooms.

Weaknesses:
- Less industry exposure to faculty
- Need to improve research and development
- Need to get consultancy projects

Opportunities:
- Due to the rapid growth of service industry more and more number or workforce is required in the country to lead the CSE graduates to get employment opportunities.

Challenges:
- Making the student aware of the latest technologies in Computer Science & Engineering.

Future Plans of the Department.
- To improve the success rate and placement record of the students.
- Modernization and sophistication of department laboratories with latest technological advancements with the financial assistance from DST,AICTE, UGC,TEQIP etc.
- Improve the Industry- Institute Interaction to mould the students to the needs of industry.
- High emphasis on personality development programmes to students along with regular academics.
- To promote research activities to enlighten the innovate skills of department and also to improve the research publications in the department.

Computer Science & Engineering Laboratories

UNIX, Advanced Java & Web Technology Laboratory

C Programming & IT Workshop Laboratory

Operating Systems, Java & DBMS Laboratory

Data Structures & Project Laboratory

UML DP, Multimedia Applications, HADOOP & Simulation Laboratory

Evaluative Report of Electrical & Electronics Engineering Department

1. **Name of the department:** Electrical & Electronics Engineering

2. **Year of Establishment:** It was established in the year 2008

3. **Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.):**

Name of Programme	Course offered	Year of Starting	Sanctioned Intake	
			Year	**Intake**
B. Tech	Electrical and Electronics Engineering	2008	2008	60
			2010	120

4. **Names of Interdisciplinary Courses and the Departments/Units Involved:**

Year & Semester	Interdisciplinary courses	Departments involved
I-I	English-I, Maths-I, Applied chemistry, Engg. Mech, C-Programming, Environmental Studies, Chemistry Lab, English Lab, C-Programming Lab	S&H
I-II	English-II, Maths-II, Maths-III, Applied Physics, Engg Drawing, Physics Lab, English Lab-II, Engg. & IT Workshop Lab	S&H
II-I	Thermal and Hydro Prime movers, Thermal and Hydro Lab	ME
II-I	Complex Variables and Statistical Methods	S&H
II-II	Environmental Studies	S&H
II-II	Pulse & Digital Circuits	ECE
III-I	Managerial Economics and Financial Analysis, IPR & Patents	S&H
III-I	Linear & Digital IC Applications	ECE
III-II	Microprocessors & Microcontrollers, MP&MC Lab	ECE
III-II	Management Science	S&H
IV-II	UNIX and Shell Programming	CSE

5. **Annual/ Semester/Choice Based Credit System (Programme Wise):**

Name of Programme	Year-Semester	Credits
B. Tech (Electrical and Electronics Engineering)	I-I	24
	I-II	24
	II-I	22
	II-II	22
	III-I	24
	III-II	22
	IV-I	21
	IV-II	21

6.   Participation of the Department in the Courses Offered by Other Departments:

Name of the Department	Year-Semester	Subject Code & Subject Name	No. of Faculty members allotted
ECE	II-I	RT21045 - Electrical Technology	02
		RT21047- Networks & Electrical Technology Lab	04
ME	II-I	RT21011 - Basic Electrical and Electronics Engineering	01
		RT21036- Basic Electrical and Electronics Lab	02
ECE	I-II	Electrical and Mechanical Technology	02
ME	I-II	Basic Electrical and Electronics Engineering	02

7.   Courses in collaboration with other universities, industries, foreign institutions, etc.:
Nil

8.   Details of courses/programmes discontinued (if any) with reasons:
Nil

9.   Number of teaching posts:

Designation	Sanctioned	Filled
Professors	2	1
Associate Professors	4	3
Assistant Professors	18	21

10.   Faculty profile with name, qualification, designation, specialization, (D.Sc. /D.Litt. /Ph.D. / M. Phil., etc.)

S. No.	Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D. guided
1	Dr.Y Narendra Kumar	Ph. D	Professor	Power Systems	14	NIL
2	Mr.B T Rama Krishna Rao	M. Tech (Ph. D)	Associate Professor	Electrical Power Engg. (Power Systems)	14	NIL
3	Mr.K Ravi Sankar	M. Tech (Ph. D)	Associate Professor	HVE (Power systems)	10	NIL
4	Mr.B V S Acharyulu	M. Tech (Ph. D)	Associate Professor	PEED (Power Systems)	08	NIL
5	Mr.P Shyam Kiran	M. Tech	Assistant	Power	10	NIL

			Professor	systems		
6	Mr.T Papi Naidu	M. Tech	Assistant Professor	P&ID	09	NIL
7	Mr. J Rajesh	M.E (Ph. D)	Assistant Professor	PED&C (PE)	09	NIL
8	Mrs.P Janaki	M. Tech	Assistant Professor	PED&C	09	NIL
9	Mrs.T Nalini	M. Tech (Ph. D)	Assistant Professor	P & ID (Power Systems)	08	NIL
10	Mrs.K Anitha	M.E	Assistant Professor	Control Systems	06	NIL
11	Mr.K Praveen Kumar	M. Tech	Assistant Professor	P&ID	06	NIL
12	Mrs.K Alfoni Jose	M. Tech	Assistant Professor	Power Electronics	06	NIL
13	Mrs.G. KUSUMA	M. E (Ph. D)	Assistant Professor	Control Systems (Control Systems)	05	NIL
14	Mr.N Avinash	M.E	Assistant Professor	Control Systems	04	NIL
15	Mr.V Dhanunjaya Naidu	M. Tech	Assistant Professor	Power systems	03	NIL
16	Mr.Y Sumith	M. Tech	Assistant Professor	P&ID	03	NIL
17	Mrs.K Nagamani	M. Tech	Assistant Professor	P&ID	03	NIL
18	Mr.CH S V Prakash	M. Tech	Assistant Professor	PEED	03	NIL
19	Mr.T Venkatesh	M.E	Assistant Professor	Control Systems	02	NIL
20	Mr.K Shankar	M. Tech	Assistant Professor	P & ID	02	NIL
21	Mr.K Srinivasa Rao	M. Tech	Assistant Professor	PEED	02	NIL
22	Mr.V Sampath Kumar	M. Tech	Assistant Professor	Power Systems & Automation	01	NIL
23	Mr.M Satish	(M. Tech)	Assistant Professor	Power Systems	NIL	NIL
24	Mr.T Satish Babu	(M. Tech)	Assistant Professor	Advanced Power Systems	NIL	NIL
25	Mrs.T V Divya Jyothi	(M. Tech)	Assistant Professor	Power Systems	NIL	NIL

11. List of senior visiting faculty: NIL

12. Percentage of lectures delivered and practical classes handled (Programme wise) by temporary faculty:

The department does not have any temporary faculty

13. Student -Teacher Ratio (Programme wise):

UG Programme   15:1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled:

Non Teaching Staff	Sanctioned	Filled
Support staff (Technical)	4	4
Support staff (Non-Technical)	1	1
Administrative staff	1	0

15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil / PG.

Ph. D	Pursuing Ph. D	M. Tech	Total
01	06	18	25

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received: NIL

17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received:

NIL

18. Research Centre /facility recognized by the University:

NO

19. Publications(Last four years):

- **Publication per faculty**

	2016-17	2015-16	2014-15	2013-14
Number of Publications	3	13	11	17

S. No.	Name of the Faculty	Title of the Paper	Details of Publication					Impact Factor
			Name of the Journal	Vol. & Issue	Year	ISSN No	
1	Dr. Y Narendra Kumar	Comparative Analysis of a two area load frequency control for an inter connected power system using PI & PID Controller.	IJSRD	3(2)	2015	2321-0613	2.39
2	Mr. B T Ramakrishna Rao	Comparison of Voltage Stability by Using Various Fact Devices	IJESC	6(4) 3931-3936	2016	2321 3361	3.712
3	Mr. B T Ramakrishna	Power System Stability analysis using SVC and	IJESC	6(4) 4011-	2016	2321	3.712

	Rao	SSSC with POD Controller		4022		3361	
4	Mr. K.Praveen Kumar	Sun Tracking Solar Panel Using Arduino Time Control	IJESC	6(4)	2016	2321 3361	3.712
5	Mr. N Avinash	Arduino based Home Automation including Ultrasonic Distance Sensor	IJESC	6(4)	2016	2321 3361	3.712
6	Mr. T Venkatesh	Design And Performance Evaluation Of Adaptive PID With SMC Scheme For Speed Control Of DC Motor	AIJREAS	1(6)	2016	2455-6300	
7	Mr. T Venkatesh	Speed Control of DC Motor and Performance is Compared with PID and SMC Controller	IJESC	6(4)	2016	2321-3361	3.712
8	Mr. V Dhanunjaya Naidu	Improvement of Voltage Profile and Reduction of Power Loss by Using TCSC Device	IJESC	6(4)	2016	2321 3361	3.712
9	Mrs. K Alfoni Jose	Control of buck-boost chopper type AC voltage regulator	IJRAET	2(3) 52-56	2016	2455-0876	5.44
10	Mrs. K Anitha	Design And Performance Evaluation Of Adaptive PID With SMC Scheme For Speed Control Of DC Motor	AIJREAS	1(6)	2016	2455-6300	
11	Mrs. K Anitha	Simulation And Speed Control Of 3-Phase Induction Motor Drives	IJESC	6(4)	2016	2321 3361	3.712
12	Mrs. P Janaki	Power Quality Improvement By Using Multi Converter Unified Power Quality Conditioning System	IJRAET	2(3)	2016	2455-0876	
13	Mrs. P Janaki	Design of DC-DC converter circuit for solar photo-voltaic cell	IJARD	1(5) 40-43	2016	2455-4030	5.24
14	Mrs. P Janaki	Analysis of Dc - Dc Converters for Renewable Energy System	IJESC	6(4)	2016	2321 3361	3.712
15	Mrs. T Nalini	Fuzzy Logic Controller Of DFIG To Ride Through Recurring Grid Faults	IJEST	8(9)	2016	0975-5462	3.03
16	Mrs. T Nalini	Small Scaled Microgrid System	IJESC	6(4)	2016	2321 3361	3.712
17	Mr. B T Ramakrishna Rao	Modeling of Series Compensator for Enhancement of Power Quality in an Isolated Power System	IJEER	3(1) 273-280	2015	2348-6988	3.26
18	Mr. B T Ramakrishna	Modeling and Simulation of Static VAR Compensator	IJEER	3(1) 281-	2015	2348-6988	3.26

	Rao	Controller for Improvement of Voltage Level in Transmission Lines		288			
19	Mr. B V S Acharyulu	Modeling and Simulation of Three Phases 4-Wire Distribution System Utilizing Unified Power Quality Conditioner (UPQC)	IJEER	3(1) 320-330	2015	2348-6988	3.26
20	Mr. B V S Acharyulu	A Control Approach for Grid Connected Inverter in Distribution System with Improvement of Power Quality	IJEER	3(1) 312-319	2015	2348-6988	3.26
21	Mr. B V S Acharyulu	Simultaneous tuning of a PSS and SVC based damping controllers employing NSGA-II for Power system stability problem	IEEE		2015		
22	Mr. K Shankar	Position Control Of PMLSM With Space Vector Pulse Width Modulation Using Matlab	IMJICE	3(4)	2015	2321-113X	
23	Mr. N Avinash	Speed Control of DC MOTOR Using Chopper	IJEER	3(1) 289-295	2015	2348-6988	3.26
24	Mr. P Shyam Kiran	Improvement Of Power Quality Using Distributed Static Compensator (DSTATCOM)	IJERM	2(3)	2015	2349-2058	3.935
25	Mr. P Shyam Kiran	Voltage Profile Improvement Using Dynamic Voltage Restorer (DVR) In Distribution System	IJEER	3(2) 18-23	2015	2348-6988	3.26
26	Mr. T Papi Naidu	Comparative analysis of PID controller for an Automatic Voltage Regulator system	IEEE		2015		
27	Mrs. K Anitha	Analysis of Active Power Factor Correction Using Single and Dual Mode Boost Converter	IJEER	3(2) 38-44	2015	2348-6988	3.26
28	Dr. Y Narendra Kumar	Speed Control of BLDC Motor Drive By Using PID Controllers	IJERA	4(4) 37-41	2014	2248-9622	3.935
29	Dr. Y Narendra Kumar	Microcontroller Based Power Consumption Monitoring and Warning System	IJERA	4(4) 121-128	2014	2248-9622	3.935
30	Mr. B T Ramakrishna Rao	Power System Stability Enhancement Using Fact Devices	IJERA	4(4) 339-344	2014	2248-9622	3.935

31	Mr. B T Ramakrishna Rao	Automation of Maximum Load Control using 8051-Microcontroller	IOSRJEN	4(4) 01-07	2014	2278-8719	3.26
32	Mr. J Rajesh	High-Frequency Resonant Matrix Converter using IGBT-Based Bidirectional Switches for Induction Heating	IJERA	4(2) 451-457	2014	2248-9622	3.935
33	Mr. P Shyam Kiran	Voltage Sag Mitigation Using Pulse Width Modulation Switched Autotransformer through MATLAB Simulation.	IJERA	4(4) 33-36	2014	2248-9622	3.935
34	Mr. T Papi Naidu	Performance of Three-Arm AC Automatic Voltage Regulator	IJERA	4(4) 32-38	2014	2248-9622	3.935
35	Mr. V Dhanunjaya Naidu	Simulink Implementation of Indirect Vector Control of Induction Machine Model	IJERA	4(4) 402-410	2014	2248-9622	3.935
36	Mr. V Dhanunjaya Naidu	Improvement Of Power Transfer Capacity By Injecting DC power Into AC Help Of Zigzag Line With The Transformer	TES	2(4)	2014	2347-1964	
37	Dr. Y Narendra Kumar	Automatic Generation Control Of Multi Area Power System Using Multi Objective Non Dominated Sorting Genetic Algorithm-Ii	EPAES (Elsevier)	--	2013	0142-0615	1.749
38	Dr. Y Narendra Kumar	Hybrid BFOA-PSO Approach For Coordinated Design Of PSS And SSSC Based Controller Considering Time Delays	EPAES (Elsevier)	---	2013	0142-0615	1.749
39	Mr. K Rajasekahr Chowdary	Performance Analysis Of SSSC Based On 48 Pulse VSC	IJEDC	1(9)	2013	2320-2084	3.46
40	Mr. P Shyam Kiran	Modelling And Simulation Of Cascaded H- Bridge Multi Level Inverter Based D statcom For Improvement Of Power Factor Quality	IJPSOEM	---	2013	2231-4407	3.43
41	Mr. P Shyam Kiran	Simulation Of Dtc Im Based On Pi & Artificial Neural Network Technique	IJAREEIE	2(7)	2013	2320-3765	5.016
42	Mr. R Ravi Kumar	Performance Analysis Of SSSC Based On 48 Pulse VSC	IJEEDC	1(9)	2013	2320-2084	3.46
43	Mr. T Papi Naidu	Application of STATCOM and CROWBAR for Transient Stability	IJSCE	2(6)	2013	2231-2307	2.638

		Improvement and Performance Enhancement for A Wind Turbine Based Doubly Fed Induction Generator					
44	Mr. Y Sumith	Simulation Of DTC IM Based On PI & Artificial Neural Network Technique	IJAREEIE	2(7)	2013	2320-3765	5.016
45	Mrs. B Divya Lakshmi	Performance Analysis Of SSSC Based On 48 Pulse VSC	IJEC	1(9)	2013	2320-2084	3.46
46	Mrs. G Kusuma	Performance Analysis Of SSSC Based On 48 Pulse VSC	IJEEDC	1(9)	2013	2320-2084	3.46
	Mr. J Rajesh	Implementation of Closed loop Boost Converter for a Solar panel	--	--	--	--	--

- Number of papers published in peer reviewed journals (national /International) by faculty and students

Year wise	International Conference	International Journal
2013-14	--	17
2014-15	03	08
2015-16	--	13
2016-17	--	03

- 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   : NIL
  - Chapter in Books   : NIL
  - Books Edited   : NIL
  - Books with ISBN/ISSN numbers with details of publishers   : NIL
  - Citation Index   : 5
  - SNIP   : NIL
  - SJR   : NIL
  - Impact factor   : 41
  - h-index   : NIL

20.   **Areas of consultancy and income generated:**
The department is in the process of getting consultancy.

21.   **Faculty as members in a) National Committees B) International Committees C) Editorial Boards…:**
Nil

22.   **Student Projects:**
a) Percentage of students who have done in-house projects including inter department/programme: 100%

b) **Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies:** Nil

23. Awards / Recognitions received by faculty and students:

- **Faculty**

S. No.	Academic Year	Name of the Faculty	Awards / Recognitions
1	2015-16	Mrs. T Nalini	Best teacher
2	2014-15	Mr. B Rama Kishore	Best teacher
3	2013-14	Mr. Y Narendra Kumar	Best teacher
4	2012-13	Mr. P Upendra Kumar	Best teacher

- **Students**

Mr. P. V. N. VARMA bearing Regd. No. **11KD1A0286** from the department has received *GOLD MEDAL* from the **JNTU Kakinada** for excelling in his Academics at the university level for the Academic year **2014-15**.

S. No.	Student Regd. No. & Name	Prize	Academic Year	Topic	Organized by
1	14KD1A0273 Y. Yogi Naik	I	2016-17	Ocean thermal energy conversion	Pragati Engineering College, Kakinada
2	14KD1A0266 T. Dinesh Shankar	I		Ocean thermal energy conversion	Pragati Engineering College, Kakinada
3	15KD1A0266 M.Pushpanjali	I		Quadcopter	Robokart, Innovation Cell UMIC, IIT Bombay
4	15KD1A02A0 S. Roja Pravallika	I		Quadcopter	Robokart, Innovation Cell UMIC, IIT Bombay
5	15KD1A02A2 G. Surya Prakash	I		Quadcopter	Robokart, Innovation Cell UMIC, IIT Bombay
6	15KD1A0282 P. Jagadeesh	I		Quadcopter	Robokart, Innovation Cell UMIC, IIT Bombay
7	15KD1A0291 S. Vamsi	I		Quadcopter	Robokart, Innovation Cell UMIC, IIT Bombay
8	13KD1A0286 P. Shyamala Rao	II	2015-16	Solar power satellite & Micro wave power transmission	BITS Pilani, Hyderabad
9	13KD1A0286 P. Shyamala Rao	I		Solar power satellite & Micro wave power transmission	APEPDCL, Visakhapatnam

10	13KD1A0286 P. Shyamala Rao	I		Digital India	Rotary club, Vizianagaram
11	13KD1A0291 R Y Naidu	II		Wireless power transmission	Coastal Institute of Technology And Management, Visakhapatnam
12	13KD1A0298 S. Jagadeesh Kumar	II		Wireless power transmission	Coastal Institute of Technology And Management, Visakhapatnam
13	14KD1A0249 P. MADHU	I		Conservation of energy	APEPDCL, Visakhapatnam
14	12KD1A0272 P. Surya Kannan	I	2013-14	Usefulness of Renewable Energy sources	GITAM University, Visakhapatnam
15	12KD1A0266 M. Sai Kiran	I		Usefulness of Renewable Energy sources	GITAM University, Visakhapatnam

24.   List of eminent academicians and scientists / visitors to the department:

S. No.	Name of Academician/Scientist	Organization	Event	Date	Academic Year
1	Prof. N. P. Padhy	IIT Roorkee	One Day Workshop	24th Dec 2016	2016-17
2	Mr. G. Mani Kumar	Naval Dockyard	Two Day workshop	17th - 18th Dec 2016	
3	Mr. P. Kalidas Dora				
4	Dr. N. Jayaram	NIT Kurkshetra	Guest lecture	24th Aug 2016	
5	Dr. Sidhartha Panda	VSSUT,Burla	Guest lecture	25th Jan 2016	2015-16
6	Prof. N. P. Padhy	IIT Roorkee	FDP & Guest lecture	5th & 6th Jan 2016	
7	Dr. Sidhartha Panda	VSSUT,Burla	Guest lecture	2nd Mar 2015	2014-15
8	Prof. D. Das	IIT Kharagpur	Guest lecture	28th Mar 2014	2013-14

25.   Seminars/ Conferences/Workshops organized & the source of funding
  a) National b) International

Academic Year	Date	Type of Event	Name of The Event	Name Of Resource Persons/Guests	Organizing Body/ Department	Source of Funding
2016-17	24th Dec- 2016	One-day Workshop	Smart Grid- Conceptualization & Implementation	Prof.N P Padhy	EEE Department	LIET
	17th & 18th Dec-	Two-day Workshop	Transformer Designing	Mr. G. Mani Kumar,	EEE Department	LIET

	2016			Mr. P. Kalidas Dora,		
	24th Aug-2016	Guest lecture	Power Electronic Converters	Dr.N Jayaram	EEE Department	LIET
2015-16	25th Jan 2016	Guest lecture	Matlab/Simulink Based Modeling, Simulation, And Analysis	Dr.Sidhartha Panda	EEE Department	LIET
	05th Jan 2016	FDP	FDP	Prof.N P Padhy	EEE Department	LIET
	06th Jan-2016	Guest lecture	Demand Management By Using Smart Grid Technology	Prof.N P Padhy	EEE Department	LIET
2013-14	28th March-2014	Guest lecture	Distributed Generation	Prof. D. Das	EEE Department	LIET

26. **Student profile programme/course wise:**

Batch	Name of the Course/programme	Applications received	No. of Students admitted	Enrolled		Pass percentage
				M	F	
2009-13		All admissions are carried by online by State govt. agency-(EAMCET) 30% Management quota	54	39	15	81.5%
2010-14	B. Tech (EEE)		121	93	28	93.3%
2011-15			131	104	27	95.4%
2012-16			119	85	34	84%

27. **Diversity of Students:**

Name of the Course U.G	% of Students from the Same State	% of Students from other States	% of Students from Abroad
2010-14	100%	Nil	Nil
2011-15	100%	Nil	Nil
2012-16	100%	Nil	Nil
2013-17	100%	Nil	Nil

28. **How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?**

Academic Year	CAT	GRE /TOFEL /IELTS	GATE/ PGECET	Any Others (Specify)
2013-14	-	-	08	02-MBA
2014-15	-	02	02	04-MBA
2015-16	01	01	-	01-MBA

29. **Student progression:**

Student Progression	2013-14	2014-15	2015-16	2016-17
UG to PG	10	08	02	
PG to Ph.D.	Nil	Nil	Nil	Nil
Ph.D. to Post-Doctoral	Nil	Nil	Nil	Nil
Employed • Campus selection	21	44	95	30
• Other than campus recruitment	11	26	16	--
Entrepreneurship/ Self-employment	--	--	01	--

30. **Details of Infrastructural facilities:**
   a) Library
   Apart from the central library the department is maintaining a separate library with 100 volumes for quick reference, monitored by the staff members. Lab manuals, Academic regulations, Syllabi, B. Tech. Project reports were also kept in the department library for reference.

   b) Internet facilities for Staff & Students
   Yes, The Department has Provided Internet facilities for all staff & students. The senior faculty is provided computer with internet in their individual cabins.

   c) Class rooms
   The department has 7 class rooms

   d) Class rooms with ICT facility
   LCD Projectors with PC

   e) Laboratories
   The available laboratories in the department are-

S.No	Description of Lab	Major Equipments
1	**Electrical Machines**	3hp DC Shunt Motor, 3 hp DC Compound Motor with Brake Unit, 5hp 3KW DC Motor Generator set, 5hp 3 KW DC Shunt Motor Series Generator set, 5 hp 3 KW DC Shunt and Compound Motor, 4 hp 3KW DC Series Motor Generator set 3 phase 220V 100A DC Rectifier Unit, 1hp 1 phase Squirrel Cage Induction Motor With Brake Unit, 3hp 3 phase Squirrel Cage Induction Motor With Brake Unit, 5hp 3 phase Slip-ring Induction Motor with Brake Unit, 5hp DC Shunt Motor, Alternator (3kva) Set, 3hp 3 phase Synchronous Motor with Brake Unit, 5hp DC Shunt Motor, Alternator (3kva) Set
2	**Power Systems**	3 phase 220V 50A DC Rectifier Unit, 3phase 3.5KVA Transformers, 60KV Oil Testing Unit, Six Number of PCs ABCD Parameters of Transmission Network Unit,
3	**Network Theory & Electrical Technology**	3hp DC Shunt Motor, 5hp DC Shunt Motor, Alternator (3kva) Set, 3 phase 5hp Slip-ring Induction Motor with Brake Unit

4	**Electrical Measurements**	Kelvin, Double, Shearing & Anderson Bridges, 1phase & 3 phase Loading Inductors, Phase Shifting Transformer
5	**Electrical Circuits**	3 phase Dimmer Stat
6	**Control Systems**	Lag-Lead Networks Study Unit, Magnetic Amplifier Unit Four number of PCs, DC & AC Servo Motors, Second Order System Study Unit, Temperature Controller Using PID
7	**Power Electronics**	Forced Commutations Circuit, 1 Phase AC Voltage Controller Circuit, 1 Phase Half & Fully Controlled Bridge Converter Circuit, 1 Phase Parallel Inverter Circuit 1 Phase Cyclo Converter Circuit, 1 Phase Dual Converter Circuit, 5kva 1 Phase Voltage Stabilizer, 3 Phase Half Controlled Bridge Converter Circuit, Buck & Boost Convertor Circuits, 1-Phase PWM Inverter With Circuit

31. Number of Students Receiving Financial Assistance from College, University, Government or Other Agencies

S. No	Academic Year	No. of Students Received Financial Assistance	Agency
1	**2015-2016**	124	Government
2	**2014-2015**	65	Government
3	**2013-2014**	194	Government

32. Details on Student Enrichment Programmes (Special Lectures / Workshops / Seminar) with External Experts:

Year	No. of Students Registered	Type of Training	Training Provided By
2016-17	70	Transformer Designing	External Expert
	65	Embedded Training	Match Well Technology Solutions
2015-16	97	Embedded Training	Techno Soft

33. Teaching Methods Adopted to Improve Student Learning:
1. Standard Black board presentation
2. Model presentation with assembled & dissembled working models
3. Power point presentation with LCD projector (For special topics)
4. NPTEL lectures

34. Participation in Institutional Social Responsibility (ISR) and Extension Activities:
NSS Activities are conducted by the department in collaboration with the institution.

35. SWOC Analysis of the Department and Future Plans
Strengths:
  ➢ Best infrastructure facilities with well equipped laboratories.
  ➢ State of the art computing facilities.
  ➢ Well qualified, experienced and dedicated faculty.
  ➢ Good academic results and placements.
  ➢ Campus located at state high-road/NH-5 with beautiful surroundings.
  ➢ Best transport facilities and easy to reach college.

- ➢ Hygienic canteen and medical facility.
- ➢ Ragging free and absolute discipline campus.
- ➢ Communication and Personality Development Programs for students
- ➢ Well stacked library with good number of national and international journals.
- ➢ Clean and Green Campus

Weaknesses:
- ➢ As most of the student population constitute from rural background they lack good Communication skills.
- ➢ Majority of the faculty don't posses doctoral degree of qualification and industrial experience
- ➢ R& D facilities has to be enhanced.
- ➢ Inadequate industry Institute Interaction.

Opportunities:
- ➢ Engineering education at affordable cost
- ➢ Global demand for technical manpower is ever growing.
- ➢ State Government is providing financial aid to the students' from weaker sections to pursue higher education.
- ➢ Placement training programmes, GATE Coaching and counseling
- ➢ Career guidance programs to motivate students.
- ➢ Faculties are allowed to upgrade the skills by attending Faculty Development Programs and workshops.
- ➢ Geographic location affords opportunity to develop consultancy work.
- ➢ Opportunities to have national and international collaborations.

Constraints
- ➢ Growing competition from nearby engineering colleges and private Universities.
- ➢ Risk of losing prominent faculty and staff.
- ➢ Fee restriction by the state government.
- ➢ Admissions and fee structure are not in the purview of the Institution.

Electrical & Electronics Engineering Laboratories

Power Systems Laboratory

Electrical Machines Laboratory

Power Electronics & Control Systems Laboratory

Electrical Measurements & Electrical Circuits Laboratory

Networks & ET and BEE Laboratory

Evaluative Report of Department of Electronics and Communication Engineering

1. **Name of the department:** Electronics and Communication Engineering

2. **Year of Establishment:** 2008

3. **Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.)**

Sl. No.	Name of the Programmes offered	Intake
1	B.Tech : Electronics and Communication Engineering	180
2	M.Tech: Embedded Systems and VLSI Design	18

4. **Names Of Interdisciplinary Courses and the departments/units involved**

Year-Sem	Interdisciplinary courses	No. of Courses	Departments Involved
I-I	English -I	1	S&H
	Mathematics-I	1	
	Mathematics-II	1	
	Engineering physics	1	
	Professional Ethics And Human Values	1	
	Engineering drawing	1	ME
	Engineering Workshop &IT workshop	1	
	English Communication Skills lab - I	1	S&H
	Engineering Physics Lab	1	
	Engineering Physics - Virtual Labs – Assignments	1	
	Engineering Workshop &IT workshop	1	CSE
I-II-	English –II	1	S&H
	Mathematics-III	1	
	Engineering Chemistry	1	
	Engineering Mechanics	1	ME
	Computer Programming	1	CSE
	Computer Programming Lab	1	
	Network Analysis	1	EEE
	Engineering Chemistry Laboratory	1	S&H
	English - Communication Skills Lab - II	1	
II-I	Managerial Economics And Financial Analysis	1	S&H
	Electrical Technology	1	EEE
	Environmental Studies	1	S&H
	Data Structures	1	CSE
	Network and Electrical Technology Lab	1	EEE
II-II	Management Science	1	S&H
III-I	IPR & Patents	1	S&H
IV-I	Computer Architecture And Organization	1	CSE

5.   Annual/ semester/choice based credit system (Programme wise)
a. B.Tech (Electronics and Communication Engineering) - Semester based Credit System

Name of The Program	Year	Semester	Credits
B. Tech	I	I	24
		II	24
	II	I	22
		II	22
	III	I	23
		II	22
	IV	I	22
		II	21

b. M.Tech (Embedded Systems and VLSI Design) – Semester based Credit System

Name of The Program	Year	Semester	Credits
M. Tech	I	I	20
		II	20
	II	I	20
		II	20

6.   Participation of the department in the courses offered by other departments

Year- Sem	Subject Name	No. of Faculty Allotted	Department in Which Subject Taught
II - I	Digital Logic Design	3	CSE
	Digital Logic Design Lab	3	
III-I	Data Communication	3	
II-I	Basic Electronic Devices	2	EEE
II-II	Switching Theory and Logic Design	2	
	Electronic Devices and Circuits Lab	2	
	Pulse and Digital C6ircuits	2	
III-I	Linear and Digital IC Applications	2	
III-II	Microprocessor and Microcontrollers	2	
IV-I	Microprocessor and Microcontrollers Lab	2	
II-I	Basic Electrical and Electronics Engineering	1	ME
	Basic Electrical and Electronics Engineering Lab	1	

7.   Courses in collaboration with other universities, industries, foreign institutions, etc: NIL

8. **Details of courses/Programs discontinued (if any) with reasons:** NIL

9. **Number of Teaching posts:**

Designation	Sanctioned	Filled
Professors	3	3
Associate Professors	10	10
Asst. Professors	22	22

10. **Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt. /Ph.D. / M. Phil. etc.,)**

S. No	Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D. Students guided for the last 4 years
1.	Dr. M. Rajan Babu	Ph.D	Professor	Wireless communications	18	NIL
2.	Dr. B. Sridhar	Ph.D	Professor	Signal& Image Processing	15	NIL
3.	Dr. S. Sridhar	Ph.D	Professor	VLSI Design Architectures	16	NIL
4.	Mr. D. Naresh Kumar	M.Tech (Ph.D)	Assoc.Professor	Microwave Antennas	13	NIL
5.	Mr. V. Nancharaiah	M.Tech (Ph.D)	Assoc.Professor	VLSI System Design	11	NIL
6.	Mrs.Bharathi Bidikar	M.Tech (Ph.D)	Assoc.Professor	Satellite Communications	10	NIL
7.	Mr. R.V.Ch Sekhar Rao	M.Tech	Assoc.Professor	Communication Systems	9	NIL
8.	Mr. K.T.P.S Kumar	M.Tech	Assoc.Professor	Radar and Microwave	9	NIL
9.	Mr. B. Rama Mohan	M.Tech	Assoc.Professor	Systems and Signal Processing	9	NIL
10.	Mr.K.Prasanna Kumar	M.Tech (Ph.D)	Assoc.Professor	VLSI, Microwave Antennas	9	NIL
11.	Mr. N Rajasekhar	M.Tech	Assoc.Professor	Radar and Microwaves	8	NIL
12.	Mr. B. Hemanth Nag	M.Tech	Assoc.Professor	DECS	8	NIL
13.	Mr. S. Rama Krishna	M.Tech	Assoc.Professor	VLSI System Design	8	NIL
14.	Ms. Ch. Gayatri	M.Tech	Asst.Professor	Systems and Signal Processing	8	NIL
15.	Ms. M. Sujatha	M.Tech	Asst.Professor	Systems and Signal Processing	8	NIL

16.	Mrs. R. Divya Kanthi	M.Tech	Asst.Professor	Communication Systems	5	NIL
17.	Mr. Sk. Azeez	M.Tech	Asst.Professor	DECS	5	NIL
18	Mrs. Razia Begum	M.Tech	Asst.Professor	VLSI System Design	5	NIL
19	Mrs.V.Swetha	M.Tech	Asst.Professor	VLSI&SD	5	NIL
20	Mr.A.Pramod Kumar	M.Tech (Ph.D)	Asst.Professor	VLSI&SD	4	NIL
21.	Mr.Ch.Surya narayana	M.Tech	Asst.Professor	VLSI &SD	4	NIL
22	Ms.G.Santhi Kumari	M.Tech	Asst.Professor	Systems and Signal Processing	3	NIL
23.	Mrs.T.Krishna Mohana	M.Tech	Asst.Professor	Communication systems	3	NIL
24.	Ms. Zamrud Fathima	M.Tech (Ph.D)	Asst.Professor	Digital Electronics and Communication systems	4	NIL
25.	Ms.K.Madhavi	M.Tech	Asst.Professor	VLSI SD	2	NIL
26.	Mr.Y.V.Koteswara Rao	M.Tech	Asst.Professor	Communications and signal Processing	1	NIL
27.	Mr.V.Y.S.S.Sudir Patnaikuni	M.Tech	Asst.Professor	Digital systems and signal processing	1	NIL
28.	Ms. Md. Azima	M.Tech	Asst.Professor	Communications and signal Processing	1	NIL
29.	Ms. J.Priyanka	M.Tech	Asst.Professor	VLSI Design and Embedded systems	1	NIL
30.	Mr.S.Suresh Kumar	M.Tech	Asst.Professor	Embedded Systems	1	NIL
31.	Mr. T.Akshaya Kumar	M.Tech	Asst.Professor	Communications and signal Processing	1	NIL
32.	Ms.Y.Yamini Devi	M.Tech	Asst.Professor	VLSI and Embedded Systems	1	NIL
33.	Ms. R.Lalitha	M.Tech	Asst.Professor	VLSI SD	1	NIL
34.	Mr.K.Sarath Babu	M.Tech	Asst.Professor	Systems and signal Processing	1	NIL
35.	Ms. P.Devi	M.Tech	Asst.Professor	Communication Systems	1	NIL

11. **List of Senior Visiting Faculty:**NIL

12. **Percentage of lectures delivered and practical classes handled (Programme wise) by temporary faculty :** The Department does not have any Temporary Faculty

13. **Student -Teacher Ratio (Programme wise) :** B.Tech : 15:1 M.Tech : 12:1

14. **Number of academic support staff (technical) and administrative staff; sanctioned and filled :**

Non Teaching Staff	Sanctioned	Filled
Academic Support Staff(Technical)	6	6
Administrative Staff	1	1
Attender	1	1
Total	8	8

15. **Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil / PG :**

PhD	Pursing PhD	M.Tech	Total
3	6	26	35

16. **Number of faculty with ongoing projects from a) National b) International funding agencies and grants received:** NIL

17. **Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received:** NIL

18. **Research Centre /facility recognized by the University:** NIL

19. **Publications(Last four years):**

a) **Publication per faculty :**

	2016-17	2015-16	2014-15	2013-14
Number of Publications	07	41	40	53

S. No.	Name of the Faculty	Title of the Paper	Details of Publication				
			Name of the Journal	Vol, Issue & Page No.	Year	ISSN No	Impact Factor
1	Dr. M. Rajan Babu	Pipeline Decimal Multiplier using Binary Multiplier	ICMEET	76	2016	1876-1100	Scopus Indexed
2	Dr. M. Rajan Babu	Modified Low Power Pulse Triggered Flip – Flop Design Based on a Signal Feed through Scheme	ICMEET	376	2016	1876-1100	Scopus Indexed
3	Dr. M. Rajan	Improved SQRT	ICMEET	376	2016	1876-	Scopus

		Architecture for Carry-Select Adder using Modified Common Boolean Logic				1100	Indexed
4	Dr. M. Rajan Babu	High Speed – Low Area – Power Efficient Carry Select Adder using GDI Technique	ICMEET	376	2016	1876-1100	Scopus Indexed
5	Mr.D.Naresh Kumar	Design and Analysis of Various Slots on Hexagonal Boundary Micro-Strip Patch Antennas	ICMEE *(Springer)*	373	2016	1876-1100	Scopus Indexed
6	Mr.D.Naresh Kumar	Design of Triple-Band CPW Fed Circular Fractal Antenna	IJCI	5(4) 1-7	2016.	2320 - 8430	--
7	Mr.D.Naresh Kumar	Design of Dual Layer Aperture Coupled Double Inverted U-slot Triple-Band Microstrip Patch Antenna for Wireless communication Applications	IEEE INDIA		2016		--
8	Dr. M Rajan Babu	Design of a New Multiband Dielectric Resonator Antenna for WLAN/WiMAX Applications	IEEE WISPNET		2016		
9	Dr. B. Sridhar	Mammographic image analysis based on adaptive morphological fuzzy logic CAD system, Inderscience	IJBET	17(4) 324-328	2015	0976-2965	0.6
10	Dr. B. Sridhar	Development of ABF and Fuzzy Based Techniques for detection of heart blocks in CT-Scan image	IJPTT	25(1) 1-5	2015	2249-2615	1.128
11	Dr. B. Sridhar	Analysis of ECG Signal for Detecting Heart Blocks Using Signal Processing Techniques	IJIRCCE	4(3)	2016	2320-9301	1.386
12	Dr. B. Sridhar	Detection of Masses in Mammogram Based on Non-Linear Filtering Techniques	JMB	4(6) 431-435	2015	1017-7825	4.333
13	Dr. S. Sridhar	Neural Networks and Wavelet Transform Based Hybrid Architectures for	IJECSE	4(1) 106-115	2016	2277-1956	

		Image Compression-An Evaluation					
14	Dr. S. Sridhar	Soft Computing Artificial Neural Networks and Transform Based Image Compression Techniques-An Analysis	IJET	1(1) 7-13	2015	2319-8613	4.027
15	Mr. D Naresh Kumar	Design of Triple Layer Double U-Slot Patch Antenna for Wireless Applications	ELSEVIER-JART	13 526-534	2015	1665-6423	0.45
16	Mr. D Naresh Kumar	Design of Conformal Patch Fed stepped Triangular DRA for Wireless and UWB Applications	IJEETC	1(3) 71-75	2015	2319-2518	
17	Mr. D Naresh Kumar	Performance Analysis of Frequency Dependent and Frequency Independent Micro-strip Patch Antennas	SPRINGER-LNEE	372 18-19	2015		
18	Mr. D Naresh Kumar	Design and Analysis of Various slots on Hexagonal Boundary Micro-Strip Patch Antennas	SPRINGER-ICMEET	373	2016		
19	Mr. D Naresh Kumar	Design of Mushroom shaped Dielectric Resonator Antenna for UWB Applications	IJSETRX	5(4)	2016		
20	Mr. D Naresh Kumar	Design of Dual-Band Rhombic Dielectric Resonator Antenna for UWB Applications	URSI		2016		
21	Mr. D Naresh Kumar	Design of U-Shaped patch antenna for UWB Applications	IEEE		2016		
22	Mr. D Naresh Kumar	Design of Rectangular U-shaped fork patch antenna for UWB and Multiband Applications	INCEMIC		2015		
23	Mr. D Naresh Kumar	Design Of Micro Strip Antenna Array for Dual Polarization With Double Band Characteristic	TC		2016		

24	Mr. D Naresh Kumar	Design of Wideband Pentagonal Fractal Antenna	IEEE-ICACCCT		2016		
25	Mr. D Naresh Kumar	Design of a New Multiband Dielectric Resonator Antenna for WLAN/WiMAX applications	IEEE WISPNET-2016,		Mar 2016, 23-25,		
26	Mr. V. Nancharaiah	Implementation of sobel and prewitt edge detections using xilinx system generator	IJAEGT	3(7) 901-905	2015,	2309-4893	
27	Mr. V. Nancharaiah	2D MRI tissue segmentation using MICO	IJSETR	5(9) 1854-56	2016	2319-8885	1.76
28	Mr. R.V.Ch Sekhar Rao	A New Signal Encryption and Decryption Using An Artificial Neural Networks	IOSR	15(4) 94-98	2016	2279-0861	5.164
29	Mr. R.V.Ch Sekhar Rao	Noise Reduction Using Beam forming Algorithms	IJESE	6(4) 4390-93	2016	2321 3361	3.21
30	Mr. B. Rama Mohan	OFDM systems and papr reduction along with channel estimation	IOSR	11(2) 4-9	2016	2278-8735	
31	Mr. B. Rama Mohan	Design and simulation of 16 point FFT for OFD applications	IJIRSE	4(7) 5149-5151	2016	2319-8753	
32	Mr. K. Prasanna Kumar	Compact CPW-Fed Uniplanar Antenna for Multiband Wireless Applications	IJIRCCE	4(3) 3164-3170	2016	2320-9798	
33	Mr. K. Prasanna Kumar	Design of Multiband CPW Fed Inverted Trapezoidal Monopole Antenna for UWB Applications	IJIRCCE	4(3)	2016	2320 - 9798	5.618
34	Mr. B. Hemanth Nag	Design of I2C Master Bus Controller with Single Slave(DS1307)	IJSETR	5(8) 1706-1709	2016	2319-8885	5.618
35	Mr. B. Hemanth Nag	Image Compression Using Adaptive Haar Wavelet Based Tetrolet Transform	IJIRCCE	4(4}652 2-28	2016	2320-9801	3.59
36	Mr. S. Rama Krishna	OFDM based mobile wimax transreciver supporting MIMO antenna configuration using Almouti model	IJSETR	5(9)	2016	2229-5518	5.618

37	Mr. S. Rama Krishna	Home Security and Automation Using GSM, Bluetooth technologies and Android Mobile Phone	IJESR		2016	2229-5518	3.29
38	Ms. Ch. Gayatri	Implementation of MIMO OFDM system using ML decoder	IJERT	5(3)	2016	2278-0181	
39	Ms. Ch. Gayatri	Robust Reversible Watermarking via clustering and Enhanced pixel wise Masking	IOSR	11(2)	2016	2319-2402,	2.25
40	Ms. M. Sujatha	Design of a New Muti-band Conical DRA for Wireless Communication Applications	IJEIT	5(9)	2016	2277-3754	3.781
41	Ms. M. Sujatha	Design and Analysis of Cylindrical Stepped C-Shaped Dielectric Resonator Antenna for C-Band Applications"	IOSR	11(2)	2016	2319-2402,	5.169
42	Ms. M. Sujatha	Objects detection using gabor filter and labeling in realtime environment	IJMTER	.3(2)	2016	: 2349-9745,	3.781
43	Mr. Sk. Azeez	Routing of Leo-based satellite using guided mode	IJEAS	3(3),	2016	2394-3661	2.012
44	Mr. Sk. Azeez	Reduction of side lobes by using auto correlation with over laying techniques	ICRISE M	1712-19	2016.	978-81-932074-1-3	5.611
45	Mr. A Pramod Kumar	A Novel ZCT-R-OFDM Based PAPR Reduction Technique with RRC	JECE	9(1)	2016		5.343
46	Mr.Ch.Surya Narana	An implementation of bypassing based multiplier by using incremental adder	IJESRT	36-42	2016	2277-9655	
47	Mr. N Rajasekhar	Audio compression using daubechie wavelet	IOSR	10(2)41-44	2015	2278-2834	4.36
48	Mr. N Rajasekhar	Aperture coupled dieletric resonator antena for s-band and wimax applications	IJESC	4(4) 4313-4317	2016	2321-3361	3.12
49	Dr. B Sridhar	Performance analysis of anisotropic diffusion filtering with	JIP	1(4) 26-35	2014	2349-6827	-

		mathematical morphology					
50	Dr. B Sridhar	An artificial neural network and mathematical morphology based computer aided detection system for cancer detection in mammogram	IJAER	9 21079-21097	2014		
51	Dr. B Sridhar	An unsupervisory qualitative image enhancement using adaptive morphological bilateral filter for medical images	IJCA	99 (13) 31-38	2014	0975 – 8887	0.75
52	Dr. B Sridhar	A morphological multigradient watersheds for segmentation of remote sensing color images	GESJ JCSTU	43(4) 3-10	2014	1512-1232	-
53	Dr. B Sridhar	Automatic Detection of Micro Calcifications in a Small Field Digital Mammography Using Morphological Adaptive Bilateral Filter and Radon Transform Based Methods	ASPJAS EM	6(12) 1290-1298	2014		-
54	Dr. B Sridhar	Intelligent Traffic Signalling System using Mathematical Morphology Techniques	IOSR-JECE	10(2) 30- 35	2015	2278-2834	3.12
55	Dr. B Sridhar	Mammographic image analysis based on adaptive morphological fuzzy logic CAD system	IJBET	17(4)	2015	0976-2965	0.6
56	Dr. S Sridhar	FPGA Implementation of Memory Optimized Distributive Arithmetic Neural Network Architecture for Image Compression	AJBAS	8	2014	1991-8178	-
57	Dr. S Sridhar	ASIC Implementation of Low Power Neural Network Architecture for Image Compression	EJSR	126(1) 350 - 361	2014	1450-216X / 1450-202X	-
58	Dr. S Sridhar	High Performance DWT for Hybrid Image Compression System	IJCSN	3(6) 584-592	2014	2277-5420	-

59	Dr. S Sridhar	Soft Computing Image Compression Models-An Analysis for Better Fidelity Measures	IJSETR	3(46) 9394-9400	2014	2319-8885	-
60	Dr. S Sridhar	Soft Computing Artificial Neural Networks and Transform Based Image Compression Techniques-An Analysis	IJET	1(1) 7-13	2015	0976-9293	-
61	Mr. D Naresh Kumar	Design of Vlinder shaped multiband patch antenna for Super high frequency and Ultra wide band applications	IJETT	22(7) 396-399	2015	2231-5381	1.656
62	Mr. D Naresh Kumar	A Multi-Band Microstrip Patch Antenna with Branch Like Slots for SHF Applications	IJETT	22 (8) 352-355	2015	2231-5381	1.656
63	Mr. V Nancharaiah	Implementation of sobel and prewitt edge detections using xilinx system generator	IJAEGT	7(3) 901-905	2015	2309-4893	-
64	Mr. V Nancharaiah	Image segmentation process by using a modularity based approach	IJERT	2(7) 1341-1345	2015	2347 - 4718	1.42
65	Mr. R.V.Ch Sekhar Rao	Implementation of Under Water System Application in Power PC Processor Based Using Fpga Ip Cores	PCIOSR-JVSP	4(6) 41-49	2014	2319 – 4200	2.82
66	Mr. R.V.Ch Sekhar Rao	Performance Improvement Technique for Multiuser Detection in DS-CDMA Systems Using Successive Interference Cancellation	IOSR-JECE	10(2) 30-35	2015	2278-2834	3.12
67	Mr. R.V.Ch Sekhar Rao	Performance analysis of CDMA 2000 1x network using smart antenna systems	IJTRE	2(7) 1296-1299	2015	2347 - 4718	1.42
68	Mr. K.T.P.S Kumar	An Image Encryption and Decryption using Chaos Algorithm	IOSR-JECE	10(2) 103-108	2015	2278-2834	3.12
69	Mr. K.T.P.S Kumar	Gesture Controlled Metal Detecting Land Rover	IJETT	21(5) 229 - 232	2015	2231-5381	1.656

70	Mr. B. Rama Mohan	Reduction of PAPER in OFDM system using HAAR wavelet based approach	IJEIT	3(7)	2014	2277-3754	3.12
71	Mr. B. Rama Mohan	Mineral detection using K- means clustering technique	IJERA	4(4)	2014	2248-9622	-
72	Mr. B. Rama Mohan	Face Recogition by Using Gabor Feature Extraction and Neural Networks	IJEIT	10(2) 68-72	2015	2278-2834	3.12
73	Mr. B. Rama Mohan	PAPR reduction techniques in OFDM systems	IJTRE	2(7) 1346 - 1349	2015	2347 - 4718	1.42
74	Mr. K. Prasanna Kumar	Despeckling of SAR Images Using Wavelet Based Spatially Adaptive Method	IJIRCCE	3(3) 1535-1541	2015	2320-9801	6.57
75	Mr. K. Prasanna Kumar	Moniter Based Specification Of PCI Of Industry Graded Protocol	IJTRE	2(7)	2015	2347 - 4718	1.42
76	Mr. B. Hemanth Nag	Design and Implementation of SPI with Built-In-Self-Test Capability over SPARTAN 2	IJARCCE	4(4) 412-415	2015	2278-1021	5.3
77	Mr. B. Hemanth Nag	Reduction of Blocking Artifacts of DCT Compressed Image Based on Block Wiener Filtering	IJARECE	4(3) 662-665	2015	2278 – 909X	-
78	Mr. S. Rama Krishna	UART Serial Communication Module Design and Simulation Based on VHDL	IJERA	5(3) 1-4	2015	2248-9622	1.6
79	Mr. S. Rama Krishna	Design and Implementation of AMBA-AHB&APB bridge memory controller by VHDL	IJECS	4(4) 11220-11232	2015	2319-7242	-
80	Mrs. R. Divya Kanthi	Multi-Carrier CDMA DMA Wireless Communication System with Channel Deterioration	IJETT	21(3) 122-126	2015	2231-5381	1.656
81	Mrs. R. Divya Kanthi	Optimization of Reduction in Side Lobe Level for Antenna Arrays using	IJETT	21(5) 267-270	2015	2231-5381	1.656

		Iterative Fourier Transform Technique					
82	Ms. Ch. Gayatri	Curtailment of clustering using SOQ	IOSR-JECE	10(2) 36-40	2015	2278-2834	3.12
83	Ms. Ch. Gayatri	secured image encryption using digital water marking and block chipper algorithm	IJTRE	2(8)	2015	2347 - 4718	1.42
84	Ms. M. Sujatha	Recognition of Human Iris Patterns for Biometric Identification	IOSR-JECE	10(2) 21-24	2015	2278-2834	3.12
85	Mr. N Rajasekhar	Design and Simulation of 64-Point FFT Using Radix-4 Algorithm for OFDM Applications	IOSR-JECE	10(2) 35-40	2015	2278-2834	3.12
86	Mr. N Rajasekhar	Audio Compression Using Daubechie Wavelet	IOSR-JECE	10(2) 41-44	2015	2278-2834	3.12
87	Mr. Sk. Azeez	Detection of Implanted Devices In Underground By Using UWB Penetrating Radar with Support of PN Code	IJIRCCE	3(3) 2084-2088	2015	2320-9801	6.57
88	Mr. Sk. Azeez	Detection of Parkinson'S Disease by Speech Analysis	IJIRCCE	3(3) 2175-2170	2015	2320-9801	6.57
89	Dr. M Rajan Babu	A hybrid reliable data transmission based on ant-agent resource allocation technique in EEMCC protocol for MANETS"	IJERA	4(4) 1-10	2014	2248-9622	1.371
90	Dr. M Rajan Babu	QOS Parameters of an Energy Efficient Multicast Congestion Control Protocol (EEMCCP) Over Fading Channels	IOSR-JCE	16(2) 72-80	2014	2278-8727	3.712
91	Dr. B Sridhar	Detection of lesions in medical image using an artificial neural networks and morphological filters	GESJ	43(3) 12-19	2014	1512-1232	0.8125
92	Dr. B Sridhar	Clustered micro calcification detection based on the Texture feature extraction using Adaptive bilateral filter, mathematical morphology& quot	IMJ	18(4) 18-25	2014	2349-6827	
93	Dr. B Sridhar	Medical image	IJISP	4(3) 56-	2013	2152-	

		segmentation by using MRF and watershed transformation		59		5056	
94	Dr. S. Sridhar	Daubechies, Coiflet, Symlet and Biorthogonal Wavelet Transforms for effectual Image Compression and Analysis of Fidelity Measures	IJDSP	11(21)	2013	2322-0368	
95	Dr. S. Sridhar	Wavelet Transform Techniques for Image Compression	IJIGSP	2 54-67	2014	2074-9074	
96	Dr. S. Sridhar	An Efficient Hybrid Image Coding Scheme Combining Wavelets, Neural Networks and Differential Pulse Code Modulation for Effectual Image Compression	IJCA	72(16)	2013	0975-8887	
97	Mr. D Naresh Kumar	Converting Symmetrical Patterns in to Asymmetrical Patterns using Amplitude and Phase Control	IJIET	2(12) 174-178	2013	2277-3754	0.672
98	Mr. D Naresh Kumar	Structural Analysis and Identification of Genomic and Proteomic Sequences Using Signal Processing Techniques	IOSR-JVSP	3(3) 44-52	2013	2319-4200	2.82
99	Mr. D Naresh Kumar	A Novel Multi Frequency Rectangular Microstrip Antenna With Dual T Shaped Slot For UWB Applications	IOSR-JECE	9(1)	2014	2278-8735	3.12
100	Mr. D Naresh Kumar	Identificaion of coding and noncoding regions in DNA sequence using Spectral Analysis	IJMER	4(2)	2014	2277 - 7881	4.527
101	Mr. V. Nancharaiah	Object detection from complex background image using circular hough transform	IJERA		2014	2248-9622	
102	Mr. V. Nancharaiah	Performance analysis of multi carrier CDMA systems	IJIRCCE	2(1) 2665-2671	2014	2320-9801	6.577
103	Mr. V.	Peak Side Lobe Levels of Legendre and Rudin-	IJEIT	3(2) 477-485	2013	2277-3754	

	Nancharaiah	Shapiro Sequences: Families of Binary Sequences					
104	Mr. V. Nancharaiah	Image Smoothing By Low Gradient Minimization	IOSR-JECE	2(3) 51-56	2013	2278-2834	3.12
105	Mr. V. Nancharaiah	Object Detection from Complex Background Image Using Circular Hough Transform	IJERA	4(4) 23-28	2014	2248-9622	1.371
106	Mr. R.V.Ch Sekhar Rao	Systematic Comparison of Different PAPR Reduction Methods in OFDM Systems	IJECEC	7(1) 21-30	2014	0974-2166	
107	Mr. R.V.Ch Sekhar Rao	Systematic comparison of performance of different Adaptive beam forming Algorithms for Smart Antenna systems	IOSR-JECE	9(1)	2014	2278-2834	3.12
108	Mr. R.V.Ch Sekhar Rao	Performance Analysis of Turbo Codes In CDMA Under AWGN and Fading	IOSR-JECE	9(2) 46-55	2014	2278-2834	3.12
109	Mr. R.V.Ch Sekhar Rao	Implementation Of Under Water System Application in Power Pc Processor Based Using FPGA IP Cores	IOSR-JVSP	4(6) 41-49	2014	2319-4200	2.82
110	Mr. K.T.P.S Kumar	Design optimization of micro strip patch antenna using genetic algorithm	IJSRCSA	2(6)	2013	2319-1953	
111	Mr. K.T.P.S Kumar	Improvement of Image Reconstruction Using Multiscale AM-FM Methods	IOSR-JECE	9(1) 72-79	2014	2278-2834	3.12
112	Mr. K.T.P.S Kumar	Performance analysis of Absolute Deviation Filter for Removal of Impulse Noise	IJIRCEC	2(1) 2770-2777	2014	2320-9801	
113	Mr. B. Rama Mohan	Reduction of PAPR In OFDM system Using Haar Wavelet Based Approach	IJEIT	3(7) 92-96	2014	2277-3754	2.915
114	Mr. B. Rama Mohan	Design optimization of micro strip patch antenna using genetic algorithm	IJSRCSA	2(6)	2013	2319-1953	
115	Mr. K. Prasanna	Implementation of Cryptography	IJMER	3(4)	2013	2277-7881	4.527

		Architecture with High secure core					
116	Mr. K. Prasanna Kumar	Denoising and Edge Detection using Sobel Method	IJMER	4(2) 147-152	2014	2249-6645	4.527
117	Mr. K. Prasanna Kumar	FPGA Implementation of DSWG using CORDIC Algorithm	IJIRCCE	1(7)	2013	2320-9798	
118	Mr. K. Prasanna Kumar	Simulation of Trigonometric signals using Area-Time Efficient Algorithm	IJERA	4(1) 307-314	2014	2248-9622	1.371
119	Mr. B. Hemanth Nag	Analysis of Different Discrete Wavelet Transform Basis Functions in Speech Signal Compression	IOSR-JVSP	4(1) 34-38	2014	2319-4200	2.82
120	Mr. B. Hemanth Nag	Under water image enhancement by Fusion	IJMER	4(3) 52-57	2014	2249-6645	4.527
121	Mr. S. Rama Krishna	Accessing multiperipherals through APB &AHB bridge on AMBA 4.0	IJARCSSE	4(1) 547-551	2014	2277-128X	
122	Mr. S. Rama Krishna	Broadband cellular networks for efficient energy communication system	IJSER	5(4)	2014	2229-5518	
123	Mrs. R. Divya Kanthi	Systematic Comparison of Different PAPR Reduction Methods in OFDM Systems	IJECEC	7(1) 21-30	2014	0974-2166	
124	Mrs. R. Divya Kanthi	Evaluation of Stability and Optimum Energy Consumption In Wireless Sensor Network	IOSR-JVSP	4(2) 6-15	2014	2319-4200	2.82
125	Mrs. R. Divya Kanthi	Reduction of PAPR in OFDM Systems Using Clipping and Differential Scaling	IOSR-JECE	9(1) 59-64	2014	2278-2834	3.12
126	Mrs. Ch. Gayatri	Implementation of Acoustic Communication in Under water using BPSK	IOSR-JECE	9(1) 73-81	2014	2278-2834	3.12

127	Mrs. Ch. Gayatri	Adaptive DS/CDMA Non-Coherent Receiver using Multiuser detection Technique	IJARCET	3(4) 470-474	2014	2278-1323	
128	Mrs. M. Sujatha	Structural Analysis and Identification of Genomic and Proteomic Sequences Using Signal Processing Techniques	IOSR-JVSP	3(3) 44-52	2013	2319-4200	2.82
129	Mrs. M. Sujatha	Design of E-Shape Microstrip Patch Antenna for Ultra Wideband Applications	IOSR-JECE	9(2) 14-18	2014	2278-2834	3.12
130	Mrs. M. Sujatha	Analysis of genomic and Proteomic Sequence using FIR Filter	IJMER	4(2) 105-111	2014	2249-6645	4.527
131	Mr. N Rajasekhar	Peak Side Lobe Levels of Legendre and Rudin-Shapiro Sequences: Families of Binary Sequences	IJEIT	3(2) 477-485	2013 &	2277-3754	
132	Mr. N Rajasekhar	Fault Secure System for Nano Memories Using EG-LDPC Codes	IJSRCSA and MS	2(5)	2013	2319-1953	
133	Mr. N Rajasekhar	Image Smoothing By Low Gradient Minimization	IOSR-JECE	2(3) 51-56	2013	2278-2834	3.12
134	Mr. N Rajasekhar	Object Detection from Complex Background Image Using Circular Hough Transform	IJERA	4(4) 23-28	2014	2248-9622	1.371
135	Mr. N Rajasekhar	Noise Removal in Image Using LPG-PCA (Local Pixel Grouping-Principle Component Analysis) Algorithm	IOSR-JECE	9(1) 36-42	2014	2278-2834	3.12
136	Mr. Sk. Azeez	Real Time Face Tracking By Using Naïve Bayes Classifier	IJIRCEC	2(1) 2692-2698	2014	2320-9801	
137	Mr. Sk. Azeez	Design optimization of micro strip patch antenna using genetic algorithm	IJSRCSA	2(6)	2013	2319-1953	
138	Mr. Sk. Azeez	Performance analysis of multi carrier CDMA system analysis	IJIRCCE	2(1) 2665-2671	2014	2320-9801	6.577
139	Mr. Sk.	Image smoothing by low gradient minimization	IOSR-JECE	2(3) 51-56	2013	2278-2834	3.12

	Azeez						
140	Ms.R. Vijaya Durga	Region-Based Image Fusion Using Complex Wavelets	IOSR-JECE	9(1) 23-26	2014	2278-2834	3.12
141	Ms.R. Vijaya Durga	Universal Cryptography Architecture Using Area Efficient Complex Data Encryption Standard (CDES) Algorithm	IOSR-JECE	9(1) 27-31	2014	2278-2834	3.12

- **Number of papers published in peer reviewed journals (national / international) by faculty and students :** 141
- **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 : NIL
- Chapter in Books : NIL
- Books Edited : NIL
- Books with ISBN/ISSN numbers with details of publishers : NIL
- Citation Index : 0-11
- SNIP : 6
- SJR : 19
- Impact factor : 2
- h-index : 5

20.   Areas of consultancy and income generated: NIL

21.   Faculty as members in   : NIL

        National committees   : NIL
        International Committees   : 4
        Editorial Boards   : NIL

22.   Student projects:

Percentage of students who have done in-house projects including inter departmental/programme	100%
Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies	0%

Best Projects by Students:

S.No	Student Name/Registration No	Title of the Project
1.	B.Janardhana Rao (12KD1A0419) M.Ramu(12KD1A0466)	The Women Security Android Application-'Suraksha'
2.	K. Bharadwaj (14KD1A0466) N.Raghav (14KD1A04A1)	GSM Based Solar Irrigation System
3.	K.Siva Teja (14KD1A0474) M.Sankar Sai (14KD1A0491)	Waste Bin Monitoring System Using GSM Technology
4.	M.Vivek (14KD1A0495)	IP Based Web Cam ROBOT

	K.Sravana Sruthi (14KD1A0473) K.Sai Sreeja (14KD1A0468) M.Sandhya (14KD1A0489)	

23.   Awards / Recognitions Received by Faculty and Students:
Faculty Awards/Recognitions:

S. No	Year	Name of the Faculty	Award /Recognition
1.	2015-16	Mr. D.Naresh Kumar	Best Teacher by Institution
2.	2014-15	Ms. R.Vijaya Durga	Best Teacher by Institution
3.	2013-14	Dr.S.Sridhar	Best Teacher by Institution
4.	2012-13	Dr.B.Sridhar	Best Teacher by Institution

Student Awards/Recognitions:

Sl. No	Year	Name of the Student	Award/Recognition
1	2016	M.Vivek, KJ.Hari Prasad, S.Sreeja	First Prize in Mechatronics 2016 (Project Expo)- Rotary Club, VZM
2	2016	CH.Vikram, G.Gopal	First Prize in Robotic Workshop- JNTU Vzm.
3	2016	A.Satish, C.Manasa, CH.Swathi	First Prize in Mechatronics 2016 (Robotics) Rotary Club, VZM
4	2016	B.Swetha, B.Priyanka	First Prize in Robotics 2016 at JNTU, VZM
5	2016	K.Vikash Agrawal, P.Priyanka	Zonal Winners at NRC-2016, JNTU VZM
6	2016	P.Hima Bindu, R.RajKumar	Second Prize in Mechatronics 2016 Rotary Club, VZM
7	2016	T.Lakshmi Narayana, B.Narsimhacharyulu	Zonal First Prize, ESCLADA-2016, GITAM University. VSKP
8	2016	G.Indu Latha, CH.Harsha Vardhini	First Prize in Paper Presentation at EPROBE-2016, ANITS,VSKP
9	2016	Sharat TirumalaRaju	First Prize in Paper Presentation at STEPCONE-16,GMRIT,Rajam
10	2015	M.Bhargavi Teja	Second Prize in paper presentation in CSI-2K15 Visakhapatnam
11	2015	B.Sowmya Devi	Project-Seond Prathanaka-2015,Miracle College Vizianagaram.
12	2013	M.Srinivasa Rao	Second prize in paper presentation, Renewable Energy 2013, LIET,Vzm
13	2013	G.Dileep Kumar	First Prize on Case study EWB meet BITS Goa.
14	2013	G.Dileep Kumar	Second Prize Paper Presentation E-Plus 2013,AIET, Narsipatnam

24.   List of Eminent Academicians and Scientists / Visitors to the Department:

S.No	Name	Details	Visiting Date
1	Prof.N.V.S.S.Sarma	NIT-Warangal	18th Sept, 2016
2	Dr.M.Chakravarty	Scientist-G, DLRL, Hyderabad	18th Sept, 2016
3	Dr.Prashant K Mishra	Scientist-E, RCI, Hyderabad	17th Sept, 2016
4	Mr. Nitin Chourasia	Scientist-E, RCI, Hyderabad	15th Sept, 2016
5	Mr C.Sairam	Scientist-F, DLRI, Hyderabad	14th Sept, 2016
6	Prof. J.Srihari Rao	Retd. Professor, NIT-Warangal	13th Sept, 2016
7	Dr. C.D.Malleswar	Scientist-G & Director-NSTL, Visakhapatnam	16th July, 2016
8	Mr. Bhagawan Prasad	AGM, BSNL, Visakhapatnam	15th June, 2016
9	Dr.B.Rajesh Kumar\	Professor, Gitam University	15th March, 2016
10	Dr. CH. Srinivasa Rao	Professor, JNTU Kakinada	29th Dec,2015
11	Dr. B.T.Krishna	Professor, JNTU Kakinada	21st Dec,2015
12	Mrs. Ch.Baby Rani	Scientist-D, DRDO- Hyderabad	12th Oct, 2014
13	Mr Abraham Varghese	Scientist-F, NSTL, Visakhapatnam	2nd Nov, 2013
14	Dr. G.Prasad	Scientist-G, NRSC-Hyderabad	3rd March, 2013

25.   Seminars/ Conferences/Workshops organized & the source of funding

a) National

S.NO	Year	Name of the Seminars/ Conferences/Workshops/FDPs	Date(s)	Source of Funding
1	2016	FDP on "Advances In Practical RF Antenna Design"	13th -19th Sep, 2016	NIT Warangal & Lendi
2	2016	One day workshop on "Recent Trends On Electronic Systems"	16th July 2016	IETE, New Delhi
3	2016	One day Workshop on "Internet of Things"	24th April 2016	Phytec Pvt Ltd
4	2015	Two day Workshop on "XILINX FPGA based Embedded and DSP Design"	23rd -24th Jan 2015	Lendi
5	2015	Two day Workshop on "Embedded system design with ARM and RTOS"	1st -2nd April 2015	Lendi
6	2014	One day Workshop on "Image processing for Remote sensing & Technology"	4th April 2014	Lendi
7	2014	One day Workshop on "VLSI Design and Signal Processing"	3rd April 2014	Lendi
8	2014	Five Day Workshop on Network Simulation Using NS2	27th -31st Dec 2013	Lendi

b)   International: NIL

26. **Student Profile Programme/course wise:*M = Male   *F = Female**

Batch	Name of the Course/ Program	Applications received	No. Of Students Admitted	Enrolled *M	*F	Pass percentage
2012-2016		140	140	83	57	91.21
2011-2015		133	133	86	47	90.2
2010-2014		142	142	91	51	84.5
2009-2013	B.Tech (ECE)	120	120	85	35	82.5
2014-2016	M.Tech (Embedded Systems and VLSI Design)	10	10	06	04	90.00
2015-2017		08	08	04	04	----

27.   Diversity of Students

Year of Admission	Name of the Course	% of Students from the Same State	% of Students from other States	% of Students from Abroad
2012-16		100	-	-
2011-15	B.Tech (ECE)	100	-	-
2010-14		100	-	-
2009-13		100	-	-
2015-17	M.Tech (Embedded Systems and VLSI Design)	100	-	-
2014-16		100	-	-

28.   How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?

YEAR	TOEFL/ GRE/ IELTS	G-MAT/ CAT	GATE/ PGECET
2015-2016	1	-	--
2014-2015	4	1	--
2013-2014	10	1	11
2012-2013	4	1	6

29.   Student Progression

Student	Percentage Against Enrolled			
	2015-16	2014-15	2013-14	2012-13
Total Number of Eligible Students	115	120	120	99
Selected Candidates	108	73	54	59
% Selected	93.91%	60.83%	45.00%	59.60%
UG to PG	2%	3%	5%	3%

PG to M.Phil	NIL	NIL	NIL	NIL
PG to Ph.D	NIL	NIL	NIL	NIL
Ph.D to Post-Doctoral	NIL	NIL	NIL	NIL
Employed Within Campus selection	91.3%	50%	36.67%	29.29%
Employed Off the campus	2.61%	10.83%	8.33%	30.3%
Entrepreneurs	NIL	NIL	NIL	NIL

30. Details of Infrastructural facilities
a) Library

S.No	No.of Titles	No.of Volumes	No.of E-Journals	No.of Print Journals
1	90	327	2	2

b) Internet facilities for Staff & Students: 25 Mbps broad band leased line from BSNL
c) Class rooms with ICT facility : 04
d) Students laboratories : 07
e) Research laboratories : 01
f) Computers: 62 Printers:2

31. Number of Students Receiving Financial Assistance from College, University, Government or Other Agencies:

S. No	Academic year	No. of students received financial assistance	Agency
1	2015-2016	332	Government
2	2014-2015	296	Government
3.	2013-2014	269	Government
4.	2012-2013	248	Government

32. Details on Student Enrichment Programmes (Special Lectures / Workshops / Seminar) with External Experts:

S. No	Year	Title of the Programme	Name of the Seminar/Conference/ Workshop	Date(s)	No. of Students Benefited
1	2016	One day workshop	Recent Trends On Electronic Systems	16th July, 2016	100
2	2016	One Day Workshop	Internet of Things	24th April, 2016	100
3	2015	Two Day Workshop	Embedded system design with ARM and RTOS	1st -2nd April, 2015	80

4	2015	Two Day Workshop	Xilinx FPGA Based Embedded And DSP System Design	23rd - 24th Jan, 2015	40
5	2014	Two Day Workshop	Embedded systems	11th -12th Dec,2014	60
6.	2013	Four Day Workshop	Hands on Experience on Embedded Systems with 8051 Microcontroller	25th -29th Jan, 2013	60

33. Teaching methods adopted to improve student learning:
1. Chalk and Board and PPT
2. Role Playing and Group Discussions
3. Conducting quiz in the topics completed
4. Concept Tests- are conceptual multiple-choice questions used during class that Provide immediate assessment of student understanding.
5. Problem sets- can be a useful way to give students practice in solving problems, doing Quantitative work outside class time, and practice specific techniques.
6. Labs can provide another way to assess student learning. The type of assessment might be a lab report, completion of the lab handout, a research project write-up, or some other assignment.
7. Concept maps can also be used for assessment.
8. Cooperative exams, also called "two-stage" or "pyramid exams", are exams that are other assignment.
9. Written and oral assignments such as papers, oral presentations, debates, simulations, and so forth can also be used to assess student learning.
10. Organizing industry visits for showing practical implementation of theoretical study.

34. Participation in Institutional Social Responsibility (ISR) and Extension activities:
- Arrangement of Blood Donation Camps
- NSS Activities
- Tree Plantation Programs
- EWB Activities
- Charity and social activities conducted by Dhruva- student's organization.

35. SWOC Analysis of the Department and Future Plans
SWOC ANALYSIS
Strengths:

- The department has good number of qualified faculty with 3 Doctorates.
- Dedicated and experienced faculty with strong ethics and commitment to provide quality education.
- Best infrastructure facilities with well equipped laboratories.
- Good academic results and placements.
- Well stacked library with good number of academic and Personality Development books
- Providing e-resource learning for the students through E-Class Rooms.

Weaknesses:

- Most of the students are from rural areas, they are lagging behind in Communication skills.
- Research labs to be setup in all areas of specialization.
- Inadequate industry Institute Interaction.

Opportunities:

- Global demand for Electronics Industry manpower is ever growing.
- Career guidance programs through providing GATE Coaching for higher studies
- State-of-the-art Embedded Systems Lab available in the department to enhance employability skills of students.
- Career guidance programs to motivate students.
- Faculties are allowed to upgrade the skills by attending Faculty Development Programs and workshops.

Constraints:

- Growing competition from nearby engineering colleges and private Universities.
- To start R & D Centre in the Department.
- To attract funding for projects form DST, AICTE, SBTET etc.
- Risk of losing prominent faculty and staff.
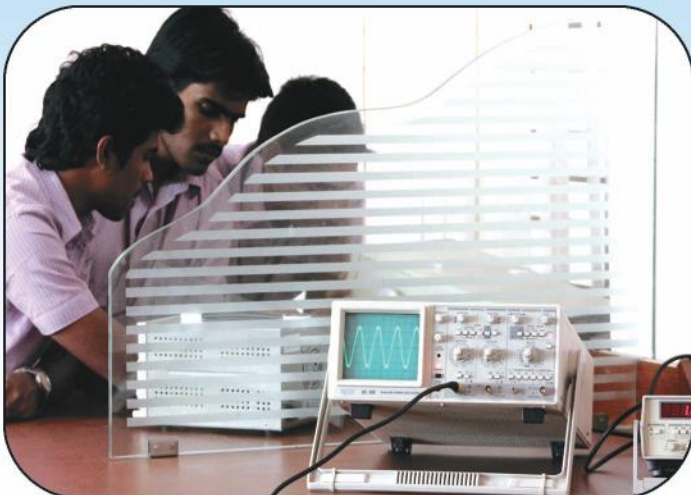
Electronics & Communication Engineering Laboratories

AC & DC Laboratory

EDC Laboratory

ECA Laboratory

PDC Laboratory

IC Laboratory

MWOC Laboratory

Electronics & Communication Engineering Laboratories

DSP Laboratory

MP & MC Laboratory

Project Implementation Laboratory

Embedded & VLSI Laboratory

Communication Laboratory-2

Evaluation Report of Mechanical Engineering

1. **Name of the department**: MECHANICAL ENGINEERING

2. **Year of Establishment:** 2012

3. **Names of Programmes / Courses offered**

Names of Programmes	Courses offered	Year of starting	Sanctioned Intake
B.Tech	Mechanical	2012	120

4. **Names of Interdisciplinary courses and the departments/units involved**

Year & Semester	Interdisciplinary Courses	Department Involved
I-I	English – I	S&H
I-I	Mathematics - I	S&H
I-I	Engineering Chemistry	S&H
I-I	Computer Programming	S&H
I-I	Environmental Studies	S&H
I-II	English – II	S&H
I-II	Mathematical Methods	S&H
I-II	Mathematics – III	S&H
I-II	Engineering Physics	S&H
I-II	Professional Ethics and Human Values	S&H
II-I	Managerial Economics and Financial Analysis	S&H
II-I	Basic Electrical and Electronics Engineering	EEE
III-I	IPR and Patents	S&H
III-II	Operations Research	S&H
III-II	Interactive Computer Graphics	CSE

5. **Annual/ semester/choice based credit system (programme wise)**

Name of the Programme	Year	Semester	Credits
B.Tech (Mechanical Engg.)	I	I	24
		II	24
	II	I	22
		II	21
	III	I	24
		II	23
	IV	I	21
		II	21

6. **Participation of the department in the courses offered by other departments**

Year & Semester	Interdisciplinary Courses	Department
I-I	Engineering Drawing	ECE
I-I	Engineering Drawing	CSE
I-I	Engineering Mechanics	EEE
I-I	Engineering Workshop	ECE
I-I	Workshop Practice	ECE
I-II	Engineering Mechanics	CSE
I-II	Engineering Drawing	EEE
I-II	Workshop Practice	EEE
I-II	Electrical And Mechanical Technology	ECE
II-I	Thermal & Hydraulic Prime Movers	EEE

7. **Courses in collaboration with other universities, industries, foreign institutions, etc.**

   There is no collaboration with other universities, industries, foreign institutions, however many faculty and students undergo various NPTEL courses.

8. **Details of courses/programmes discontinued (if any) with reasons**

   NIL

9. **Number of Teaching posts**

Post	Sanctioned	Filled
Professors	2	2
Associate Professors	4	4
Asst. Professors	18	18

10. **Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt. /Ph.D. / M. Phil. etc.,)**

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D. Students guided for the last 4 years
Dr. S.Srikiran	M.Tech, Ph.D	Professor	Manufacturing	18	NIL
Dr. Satish Pujari	M.E, Ph.D.	Professor	CAD/CAM	12	NIL

11. **List of senior visiting faculty:** NIL

12. **Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty:** NIL

13. **Student -Teacher Ratio (programme wise)** B.Tech 15:1

14. **Number of academic support staff (technical) and administrative staff; sanctioned and filled**

Non-Teaching Staff	Sanctioned	Filled
Administrative staff	1	1
Technical	10	8
Non- Technical	1	1

15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil / PG.

PhD	Pursing PhD	M.Tech	Total
2	3	19	24

Name	Qualification	Designation	Specialization	No. of Years of Experience
Dr. S.Srikiran	M.Tech, Ph.D	Professor	Manufacturing	18
Dr. Satish Pujari	M.E, Ph.D	Professor	CAD/CAM	11
Mr. K.Ch.Sekhar	M.E.	Associate Professor	CAD/CAM	5
Mrs. Somireddy Hemalatha	M.E, (PhD)	Associate Professor	I.E.	3
Mrs. G. Shiva Karuna	M.Tech, (PhD)	Associate Professor	Machine Design	6
Mrs. Fathimunnisa Begum	M.E, (PhD)	Associate Professor	Thermal Engg.	2
Mr. P.Rajeev	M.Tech	Asst. Professor	Manufacturing	1
Mr.V.C.Sandeep Raj	M.E	Asst. Professor	Marine Engineering	8
Mr. P.Srinivas Reddy	M.Tech	Asst. Professor	CAD/CAM	5
Mr. D.Suresh	M.Tech	Asst. Professor	CAD/CAM	3
Mr. D. Srinivasa Rao	M.Tech	Asst. Professor	Machine Design	2
Mr. S. Santosh	M.Tech	Asst. Professor	CAD/CAM	3
Mr. M. Daniel Silas	M.E	Asst. Professor	CAD/CAM	2
Mr. M.Pradeep Kumar	M.Tech	Asst. Professor	Thermal Engg.	2
Mr. Ramanjaneyulu	M.E	Asst. Professor	Machine Design	2
Mr. R.Rama Krishna	M.E	Asst. Professor	Machine Design	2
Ms. P.Jagadamba	M.Tech	Asst. Professor	CAD/CAM	1
Mr. V. Krishna Kanth	M.Tech	Asst. Professor	Design & Manufacturing	2
Mr. Ch. Polayya	M.Tech	Asst. Professor	Machine Design	1
Mr. P.Nagaraju	M.Tech	Asst. Professor	Thermal Engg.	2
Mr. I. Anil Kumar	M.Tech	Asst. Professor	Machine Design	1
Mr. M. Balaji	M.Tech	Asst. Professor	Machine Design	1
Mr. M.Hari Kishan	M.Tech	Asst. Professor	Machine Design	1
Mr. M.Siva	M.Tech	Asst. Professor	CAD/CAM	1

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received

NIL

17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received

NIL

18. Research Centre /facility recognized by the University

The department is in the process of getting recognition from the university. However , following organizations have recognized our facilities for the purpose of testing their materials .

i.   PMR Construction, Seethammadhara, Visakhapatnam

ii.   SKI DESIGNS , Malkapuram, Visakhapatnam

19. **Publications (Last four years):**

a) **Publication per faculty:**

	2016-17	2015-16	2014-15
Number of Publications	29	9	2

S. No.	Name of the Faculty	Title of the Paper	Details of Publication				Impact Factor
			Name of the Journal	Vol. & Issue	Year	ISSN No	
1	Dr. S.Srikiran	Investigating the Effect of Nano Crystalline MoS_2 Particles on the Surface Integrity of Turned Components	PMS (Elsevier)	In press	In press	In press	2.35
2	Dr. S.Srikiran	Performance Assessment and Study of Tribological Properties of Self-lubricating Materials for Dry Lubrication	JMERD	39(3) 1570-1580	2016	1024-1752	1.7
3	Dr. S.Srikiran	"Performance evaluation and optimization of nano boric acid powder weight percentage mixed with vegetable oil using the Taguchi approach	JMST	26(5) 4877-4883	2016	4877-4883	0.761
4	Dr. S.Srikiran	Performance Evaluation and Optimization of Nano Boric Acid Powder Mixed With Vegetable Oil in Turning of AISI 1040 Steel using Taguchi approach	MMP	4877	2015	2015-0289	1.629
5	Dr. V.V.Rama Reddy	Design and thermal analysis of cooling of Gas turbine blade through radial holes accepted for Proceedia of Material Science, Elsevier Publishers	PMS (Elsevier)	In press	In press	In press	
6	Dr. V.V.Rama Reddy	Design Considerations for Underwater Glider Pressure Hulls	PMS (Elsevier)	In press	In press	In press	
7	Dr. V.V.Rama Reddy	Investigating the Effect of Nano Crystalline MoS_2 Particles on the Surface Integrity of Turned Components	PMS (Elsevier)	In press	In press	In press	
8	Dr. Satish Pujari	Comparison of ANN and Regression Analysis for Predicting the Water Absorption behavior of Jute and Banana Fiber Reinforced Epoxy	PMS (Elsevier).	In press	In press	In press	
9	Dr. Satish Pujari	Prediction of Swelling Behaviour of Jute and Banana fiber Reinforced Epoxy Composites by Using ANN	PMS (Elsevier)	In press	In press	In press	

		and Regression Analysis					
10	Dr. Satish Pujari	Free Vibration, Buckling and Design Optimization of Composite Pressure Hulls	PMS (Elsevier)	In press	In press	In press	
11	Dr. Satish Pujari	Analysis of muscle movement and reaction force of elbow joint during flexion movement	IJBET	22(4) 370-376	2016.	2250-2122	0.59.
12	Dr. Satish Pujari	"Investigations On Thermal Conductivities of Jute and Banana Fiber Reinforced Epoxy Composites",	JIE (Springer)	102(8) 1-5	2016	2250-2122	1.199
13	Dr. Satish Pujari	Condition Monitoring And Dynamic Balancing Of A Hot Air Circulation Blower By Vibration Tool	IJESRT	5(3) 40-49	2016	2277-9655	3.785
14	Dr. Satish Pujari	Experimental Investigation Of Mechanical Properties Of Uni directional jute and banana fiber composites",	JAPT	21(4) 302-308	2015	2068-9551	0 .867
15	Mr. K.Ch.Sekhar	Design Considerations for Underwater Glider Pressure Hulls	PMS (Elsevier)	In press	In press	In press	
16	Mr. K.Ch.Sekhar	Investigating the Effect of Nano Crystalline MoS_2 Particles on the Surface Integrity of Turned Components	PMS (Elsevier)	In press	In press	In press	
17	Mrs. Somireddy Hemalatha	Supply chain performance evaluation through AHM and Membership degree transformation	MTP	In press	In press	In press	
18	Mrs. Somireddy Hemalatha	Supply chain strategy based supplier evaluation-An integrated framework"	IJMVSC	6(2) 69-84	2015		0.36
19	Mrs. Somireddy Hemalatha	Analysis Of Supplier's Performance Through Fpir/Fnir And Membership Degree Transformation	ICCSIT		2015		2.62
20	Mrs. Somireddy Hemalatha	Evaluation and Ranking of major Indian sea ports through SFA-PCA and DEA	ICET	4 158-162	2006	978-1-5090-3213-6	2.5
21	Mrs. G. Shiva Karuna	Static And Dynamic Analysis Of Composite Rotor Blade	IJATES	4(2) 145-156	2016	2348-7550	1.012
22	Mrs. G. Shiva Karuna	Statistical analysis on weld bead geometry of pulsed current micro-plasma arc welded AISI 316Ti austenitic stainless steel sheets	JMME	6(2) 20-37	2016	2231-3818	3.394
23	Mrs. Fathimunnisa Begum	Design and thermal analysis of cooling of Gas turbine blade through radial holes	PMS (Elsevier)	In press	In press	In press	
24	Mr. P.Srinivas Reddy	Experimental investigation of cutting parameters of nano lubrication on turning AISI 1040 steel	ICAMT	In press	In press	In press	

25	Mr. P.Srinivas Reddy	Optimization of machining parameters using taguchi approach during hard turning of alloy steel with uncoated carbide under dry cutting environment.	IJLT	6(2) 1543-1556	2016	2348-4845	**2.7**
26	Mr. P.Srinivas Reddy	Characterization of Aluminium Reinforced with Tungsten Carbide Particulate and Flyash Metal Matrix Composites	IJERT	6(5) 623-627	2016	2278-0181	**0.36**
27	Mr. M. Daniel Silas	Investigating the Effect of Nano Crystalline MoS_2 Particles on the Surface Integrity of Turned Components	PMS (Elsevier)	In press	In press	In press	
28	Mr. M. Daniel Silas	Analysis of muscle movement and reaction force of elbow joint during flexion movement,	IJBET	22(4) 370-376	2016	2250-2122	0.59
29	Mr. Ramanjaneyulu	Design and Development of Graphene reinforced Acetal copolymer plastic gears and its performance evaluation	PMS (Elsevier)	In press	In press	In press	
30	Mr. Ramanjaneyulu	Design and thermal analysis of cooling of Gas turbine blade through radial holes	PMS (Elsevier)	In press	In press	In press	
31	Mr. V. Krishna Kanth	Experimental investigation of cutting parameters of nano lubrication on turning AISI 1040 steel	ICAMT	In press	In press	In press	
32	Mr. V. Krishna Kanth	Optimization of machining parameters using taguchi approach during hard turning of alloy steel with uncoated carbide under dry cutting environment.	IJLT	6(2) 1543-1556	2016	2348-4845	0.36
33	Mr. V. Krishna Kanth	Characterization of Aluminium Reinforced with Tungsten Carbide Particulate and Flyash Metal Matrix Composites	IJERT	6(5) 623-627	2016	2278-0181	2.1
34	Mr. Ch. Polayya	Modeling and fluent analysis of B series marine propeller	IJIRAT	5(4) 60-65	2016	2319-1467.	1.642
35	Mr. Ch. Polayya	Comparison, performance and emission characteristics of waste pyrolysis oil	IJATIR	8(7) 1462-1466	2016	2348–2370	0.567
36	Mr. Ch. Polayya	Optimization of process parameters for wire cut electric discharge machining of inconal 718 super alloy.	IJATIR	09(1) 0026-0030	2017	2348–2370	2.3
37	Mr. Ch. Polayya	Perfomance and emission analysis of dual biodiesel on VCR engine	IJARLT	8(4) 1922-	2016	ISSN 3011-	4.490

				1926		3030	
38	Mr. I. Anil Kumar	Mechanical Performance and Prediction of Gas Turbine Blade with Smart Materials	IJSRD	4(3) 1440-1446	2016	2321-0613	2.39
39	Mr. I. Anil Kumar	Simulation Of Human Femur Bonecomponent With Smart Materials	IJARSE	5(1) 50-59	2016	2319-8354	2.712
40	Mr. I. Anil Kumar	Design and static analysis of composite leaf spring for heavy vehicle	IRJET	3(5) 1-7	2016	2395 - 0056	4.45

- Number of papers published in peer reviewed journals (national /international) by faculty and students : Faculty 40 & Students 6
- 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.): 8
- Monographs: NIL

- Chapter in Books: NIL
- Books Edited : NIL
- Books with ISBN/ISSN numbers with details of publishers: NIL
- Citation Index: 39 papers
- SNIP
- SJR
- Impact factor: 30 papers
- h-index: 20 papers

20. **Areas of consultancy and income generated:**

S. No	Name of the Organisation	Work profile	Amount Generated
1	Experimental work from students of VITS, Visakhapatnam	UTM Tensile Testing	1000
2	Experimental work from students of Raghu Engineering College, Visakhapatnam	UTM Tensile Testing	1400
3	Experimental work from students of ANITS, Visakhapatnam	UTM Tensile Testing	4000
4	Experimental work from students of Miracle, Vizianagaram	UTM Tensile Testing	2000
5	PMR Constructions,Seethammadhara, Visakhapatnam	UTM Tensile Testing	5000
6	SKI DESIGNS, Malkapuram, Visakhapatnam	UTM compression Testing	5000

21. **Faculty as members in**

a)National committees b) International Committees c) EditorialBoards….

Sl. No	Member of	Name of Faculty

1	Editorial board member of Journal of Mechanical Engineering Research and Developments" (http://www.jmerd.org)	Dr. S.Srikiran

22. Student projects

a) Percentage of students who have done in-house projects including inter departmental/programme

All the project batches have done their projects in-house.

b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies

- Two students have done projects outside the college, that is, at TEGA Industries, Kolkata and IIT Madras

23. Awards / Recognitions received by faculty and students

Year	Name of the Faculty	Awards / Recognitions
2016	Dr. Satish Pujari	Best teacher award
2015	Mrs. S.Hemalatha	Best teacher award
2014	Mr.K.Ch.Sekhar	Best teacher award

Sports (students):

1. .B. Sudheer Kumar bagged Gold medal in Kick Boxing at 24th A.P State Kick Boxing Championship.
2. A.V. Ramana Vivek stood Second in 66 Kg weight lifting competition conducted by "Andhra Pradesh Power Lifting Association".
3. A.V. Ramana Vivek was triumphant and stood Third in 69 Kg weight lifting competition in Inter College level event conducted by JNTU, Kakinada.
4. A.V. Ramana Vivek stood Third in 56 Kg weight lifting competition conducted by " Major Ports Sports Control Board" in Visakhapatnam.
5. Our students G.S.K. Pavan , V.Premsagar and B.Narendra participated in badminton competition organised and conducted by JNTU Kakinada.
6. T.Ravi, Ch.Suresh, Y.Mohan Rao ,K.Dileep Kumar , N.Yeswanth and A.Vasavi participated in kabaddi competitions conducted by JNTU Kakinada.
7. G.Avinash and A.Lallu Prasad of III year have participated in volleyball competitions held at JNTU Kakinada.
8. S.Bramma Ajay and A.Phanedhra Kumar of IV year have participated in football competitions held at JNTU Kakinada organised by Government of Andhra Pradesh

Academic Toppers:

Academic year	Year	Names of the Students
2014	II YEAR	Baba Bala Kishore
2015	II YEAR	M.Venkatesh
	III YEAR	Baba Bala Kishore
	II YEAR	K.B.S.Chandrika
	III YEAR	M.Venkatesh
2016.	IV YEAR	Baba Bala Kishore

24. List of eminent academicians and scientists / visitors to the department

S.No	Name of the Faculty	Date of Lecture
1	Dr.D.Sriramulu, Professor, AITAM, TEKKALI	15-08-2016
2	Dr. K T B Padal, Professor, AUCE, Andhra University,	10-08-2016

	VSKP	
3	Dr. M K Rao, Assistant Professor, IIT Roorkie	14-10-2015
4	Dr.B V M Kumar, Associate Professor, IIT Roorkie	15-08-2015

25. **Seminars/ Conferences/Workshops organized & the source of funding a) National b) International**

- A one week workshop on " Design and manufacturing tools using CATIA". From 14-11-2016 to 19-11-2016, conducted by CSM Technology, Bengaluru

26. Student Profile Programme/Course Wise:

Name of the Course/Programme	Batch	Applications received	Number of Students Admitted	Enrolled *M	Enrolled *F	Pass Percentage
B.Tech (Mechanical Engineering)	2013-17	All admissions are carried by State govt. & management	144	134	10	--
	2012-16		142	117	25	83%

*M = Male   *F = Female

27. Diversity of Students

Academic Year	% of Students From The Same State	% of Students from Other States	% of Students from Abroad
2016-17	100%	Nil	Nil
2015-16	98.6%	1.4	Nil
2014-15	100%	Nil	Nil
2013-14	98.6%	1.4	Nil

28. **How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?** NIL

29. Student progression: Batch 2012-16

Student Progression	Against % enrolled
UG to PG	NIL
Employed • Campus selection • Other than campus recruitment	41 24
Entrepreneurship/Self-employment	02

30. Details of Infrastructural facilities:

 a) **Library:** In addition to the central library the department has a separate library with 100 volumes which caters as a quick reference for the students as well as the faculty members. Lab manuals, Academic regulations, Syllabi, B. Tech. Project reports are kept in the department library for reference.
 b) **Internet facilities for Staff & Students:** The campus is wi-fi enabled campus. In addition, all the systems are provided with LAN connections.
 c) **Class rooms with ICT facility:** The department has 6 class rooms, 2 class rooms equipped with internet and LCD's and one Counselling room.
 d) **Laboratories:** The department has 10 laboratories which fulfils the requirements of the syllabus.

S.No	Lab Description	Major Equipment
1	Fluid Mechanics and Hydraullic Machinery	Fransis Turbine, Multi Stage Centrifugal Pump Test Rig, Pelton Wheel Turbine, Centrifugal Pump Test Rig,
2	Machine Tools Lab	All Geared Lathe Machine, Planning Machine, Radial Drilling Machine, Tool And Cutter Grinding Machine, Milling Machine.
3	Production Technology	Tig Welding Machine, Blow Moulding Machine, Powe Press (15ton), Gas Welding Equipment.
4	Mechsnics Of Solids	Universal Testing Machine, Impact Testing Machine, Rockwell Hardness Testing Machine, Brinell's Hardness Testing Machine.
5	Mms Lab	Mechanical Specimen Mounting Press, Dual Disc Polisher, Jomminy End Quench Test, Metzer-M-Binocular Metallurgical Microscope, Metzer-M-Trinocular Metallurgical Microscope(1.3 MP Camera).
6	Metrology Lab	Surface Roughness Tester With Accessories, Toolmakers' Microscope, Measuring Bore Dial Gauge (18-35mm).
8	Instrumentation and Contol Systems	Dead Weight Presure Tester, Calibiration Of Of Strain Gauge, L.V.D.T Apparatus, Speed Measuring Apparatus Rotameter For Flow Measrement, Mcleod Gauge For Low Pressure Measurement.
9	Heat Transfer	Critical Heat Flux Apparatus, Drop &Film Wise Condensation Apparatus, Emissivity Measurement Apparatus, Heat Transfer Through The Compossite Wall Slab, Stefen Boltzman Apparatus, Heat Pipe Demonostratio, Heat Transfer Through Forcedconvection
10	Thermal Engineering Lab	4-Stroke Multi Cylinder Petrol Engine, 4- Stroke Twin Culinderdiesel Engine, 2-Stroke Single Cylinder Petrol Engine, Single Cylinder Variable Compressor Ratio Petrol Engine.

e) **Computers:** 3 **Printers:** 2

31. **Number of students receiving financial assistance from college, university,government or other agencies:** - In total 325 students are receiving financial assistance from the state government.

32. **Details on student enrichment programmes (special lectures / workshops /seminar) with external experts:**
 A 3 day workshop on "Solar vehicle design and manufacturing" from 26-12-2016 to 28-12-2016, conducted by EFFDEAL.COM and certified by TECH Learning solutions, Kolkata.

33. **Teaching methods adopted to improve student learning**

Some of the common methods used are
1. Standard Black board presentation
2. Model presentation with assembled & dissembled working models
3. Power point presentation with LCD projector (For special topics)
4. NPTEL lectures

34. **Participation in Institutional Social Responsibility (ISR) and Extension activities**

Many of the students are active participants in NSS activities.

35. **SWOC analysis of the department and Future plans**

SWOC ANALYSIS

Strengths:
- Well equipped laboratories.
- Excellent academic background faculty.
- Well designed schedule.
- Collaborative learning among students.

Weaknesses:
- Deficiencies in communication skills.
- Absence of industrial participation.
- Participation of faculty in research is minute.

Opportunities:
- Availability of developing new teaching methods.
- New trends in multidisciplinary professional education.
- Increase in technology.
- Range of job opportunities and potential earnings is wider.

Constraints
- Competitive strategies for higher education.
- Highly Competitive environment with the increase of private universities.
- Risk in loss of experienced faculty members.
- Government predetermined fee structure.
- Centralized online admission process.

Mechanical Engineering Laboratories

Simulation Laboratory

Basic Workshop Laboratory

Metallurgy and Material Science Laboratory

Mechanics of Solids Laboratory

Instrumentation & Control Systems Laboratory

Heat and Mass Transfer Laboratory

Mechanical Engineering Laboratories

Production Technology Laboratory

Welding Technology

Manufacturing Technology Laboratory

Thermal Engineering Laboratory

FM & HM Laboratory

EVALUATIVE REPORT OF SCIENCE AND HUMANITIES

1. **Name of the department:** Science and Humanities

2. **Year of Establishment:** 2008

3. **Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.):** UG (B.Tech).

4. **Names of Interdisciplinary courses and the departments/units involved**

Year & Semester	Branch	Interdisciplinary Courses	Department Involved
I-I	ECE,CSE,EEE,ME	Computer Programming	CSE
I-I	CSE,EEE,ME	Computer Programming Lab	CSE
I-I	ECE	IT Workshop Lab	CSE
I-I	EEE,ME	Engineering Mechanics	ME
I-I	ECE,CSE	Engineering Drawing	ME
I-I	ECE	Engineering Workshop Lab	ME
I-II	ECE	Data Structures	CSE
I-II	CSE	Engineering Mechanics	ME
I-II	EEE.ME	IT Workshop Lab	CSE
I-II	ECE	Computer Programming Lab	CSE
I-II	CSE	Object Oriented Programming Through C++	CSE
I-II	CSE	Object Oriented Programming Lab	CSE
I-II	EEE.ME	Engineering Workshop Lab	ME
I-II	ECE	Electrical And Mechanical Technology	EEE & ME
I-II	EEE	Electrical Circuit Analysis-I	EEE
I-II	ME	Basic Electrical And Electronic Engineering	EEE

5. **Annual/ semester/choice based credit system (programme wise):** Semster System

Year & Semester	Branch	Credits
I-I	ECE	24
I-I	CSE	24
I-I	EEE	24
I-I	ME	24
I-II	ECE	24
I-II	CSE	24
I-II	EEE	24
I-II	ME	24

6. **Participation of the department in the courses offered by other departments**

Year & Semester	Interdisciplinary Courses	Participation Department
II-I	CVSM	EEE
II-I	ES	ECE
II-I	MEFA	CSE
II-I	MEFA	ECE
II-I	MEFA	ME
III-I	IPR&P	ECE
III-I	IPR&P	EEE
III-I	IPR&P	ME
III-I	MEFA	EEE
II-II	ES	EEE
II-II	MS	ECE
II-II	P&S	CSE
III-II	IEM	ME
III-II	IPR&P	CSE
III-II	MS	EEE
III-II	OR	ME
IV-II	MS	CSE

7. **Courses in collaboration with other universities, industries, foreign institutions, etc:** NIL

8. **Details of courses/programmes discontinued (if any) with reasons:** NIL

9. **Number of Teaching posts:**

Designation	Sanctioned	Filled
Professors	5	5
Associate Professors	5	5
Asst. Professors	24	24

10. **Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt. /Ph.D. / M. Phil. Etc.,)**

S.No	Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D
1	Mr.K.V.Narasimham	M.Sc,M.Phil, PGDCA,,CSIR-NET,(Ph.D)	Professor	Mathematics	21	
2	Dr.K.Ramesh	M.Sc,M.Ed,Ph.D	Professor	Mathematics	27	
3	Dr.P.Durga Sailaja	M.Sc,M.Phil,Ph.D	Professor	Mathematics	15	
4	Dr.T.Haribabu	M.Sc,M.Phil,Ph.D	Professor	English	19	
5	Dr.K.AppaRao	M.sc., Ph.D.,	Professor	Chemistry	10	
6	Mr.R.Bulli Babu	M.Sc,M.Phil,B.Ed	Assoc Professor	Mathematics	12	
7	Dr.M.Anupama	M.Sc,Ph.D	Assoc Professor	Chemistry	9	

8	Dr.P.Tirumala	MHRM,MBA,M.Com,Ph.D	Assoc Professor	Management studies	17	
9	Dr.P.Suseela Rani	M.Com,MBA,Ph.D,DCS	Assoc Professor	Management studies	21	
10	Dr J.V.S.K.V.Kalyani	M.Sc,Ph.D	Assoc Professor	Chemistry	13	
11	Mr.R.Venkateswara Rao	M.Sc,M.Phil,(Ph.D), PGDCA.,	Senior Asst.Professor	Physics	12.8	
12	Mr.M.Gangu Naidu	M.A,MBA,M.Com,(Ph.D)	Asst.Professor	Management studies	9	
13	Mr.M.Balakrishna	M.Sc,B.Ed,APSET, PGDCA	Asst.Professor	Chemistry	9	
14	Mrs.K.Jyothi	M.Sc,B.Ed(M.Phil)	Asst.Professor	English	12	
15	Mrs.M.Madhuri	M.Sc	Asst.Professor	Mathematics	5	
16	Mrs.Y.Roja	M.A,	Asst.Professor	English	6	
17	Mr G.Srinivasa rao	M.Sc,M.Phil,B.Ed	Asst.Professor	Mathematics	9	
18	Mr.B.Vinay Kumar	M.A,(Ph.D)	Asst.Professor	English	10	
19	Mrs E.Jyothi	M.Sc(Ph.D)	Asst.Professor	Environmental Sciences	3.5	
20	Mr G.V.Nagesh	M.Sc,(Ph.D)	Asst.Professor	Physics	10	
21	Mr R.Ramakrishna	M.Sc	Asst.Professor	Physics	3	
22	Mr.B.G.G.Krishna Raju	M.Sc	Asst.Professor	Chemistry	2	
23	Ms T.V.Sravanthi	M.A	Asst.Professor	English	0.1	
24	Mr. D. Uma Shankar	M.A., M.Sc.,	Asst.Professor	English	8	
25	Mrs Ch.V.R.L.Gayathri	M.Sc., (Ph.D)	Asst.Professor	Environmental Sciences	6	
26	Mr Paul Spurgeon Sandeep Nicodemus	M.A.,	Asst.Professor	English	6	
27	Ms N.Divya	M.A.,	Asst.Professor	English	1	
28	Mrs K. Govindamma	MBA	Asst.Professor	Management Studies	1	
29	Ms.Y.Sandhya Rani	M.A.,	Asst.Professor	English	1	
30	Mrs. D.Subhashini	M.B.A	Asst.Professor	Management Studies	1	
31	Mrs.P.Annapurna	M.Sc.,	Asst.Professor	Physics	1	
32	Mrs Y.Narayananmma	M.Sc.,	Asst.Professor	Mathematics	1	
33	Ms. Ch.Prasanthi	M.Sc.,	Asst.Professor	Mathematics	1	
34	Mrs B.Neeraja	M.B.A	Asst.Professor	Management Studies	1	

11. **List of senior visiting faculty:** NIL

12. **Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty:** NIL

13. **Student -Teacher Ratio (programme wise):** 15:1

14. **Number of academic support staff (technical) and administrative staff; sanctioned and filled**

Staff	Sanctioned	Filled
Technical Staff	3	1
Admin Staff	1	0
Attender	1	1

15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil / PG.

Ph.D.,	Pursuing Ph.D	M.Phil.,	P.G.	Total
8	7	2	17	34

16. **Number of faculty with ongoing projects from a) National b) International funding agencies and grants received:** NIL

17. **Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received:** NIL

18. **Research Centre /facility recognized by the University:** NIL

19. **Publications(Last four year):**

 ➢ **Publication per faculty**

	2016-17	2015-16	2014-15	2013-14
Number of Publications	2	7	8	10

S. No.	Name of the Faculty	Title of the Paper	Name of the Journal	Vol. & Issue	Year	ISSN No	Impact Factor
			Details of Publication				
1	Dr.T.Haribabu	Movies Supplement English Classroom to be Effective in Improving Students Listening and Speaking Skills - A Review	IJSELL	4(6) 35-37	2016	2347 - 3126	
2	Mrs.K.Jyothi	Ethics and moral values-in Ralph Elision's invisible man	IMLRJ	1(13) 78	2016	2394 - 5303	3.024
3	Mrs.Y.Roja	Challenges in implementing CLIL:A revises	11th IC & 47thNC ELTAI		2016		
4	Dr.P.Tirumala	Work life balance weights quality of work life of employees in steel Industry	IJITM		2015	2394 - 594 X	
5	Mr.B.Vinay Kumar	Honing life skills for growth and development	ICS		2015		
6	Mr.B.Vinay Kumar	Social technical complexity	ELDESCG		2015		
7	Mrs.Y.Roja	Learning Language Through mythology and Philosophy.	ICELL		2015		

8	Mr R Venkateswara Rao	Trace elemental analysis of cashew samples from Kidney effected area by using EDXRF	NWULE IB		2015		
9	Dr.P.Durga Sailaja	Existence of Coupled Fixed Points by using Generalized Altering Distance Functions in Four Variables under F - Invariant Set,	IJMASC	4 (2)	2014	2231 - 5330	
10	Dr.T.Haribabu	Gandhism is always a powerful tool of Social Change: A Study of Vizai Bhaskar's The Return of Gandhi	CIJE	5(2) 168-171	2014	0976 - 8165	
11	Mr.B.Vinay Kumar	Empowering Gen"y" with life skills	IALSE	2 7-10	2014	978-93	
12	Mr.B.Vinay Kumar	Empowering Gen"y"as future manager through soft skills	IJISME	3	2014	2319 - 6386	
13	Mrs.K.Jyothi	The ethics of Identity and community in social networking services	ISGI		2014		
14	Mrs.Y.Roja	Internet in the English class room	NSCP D ELTOC		2014		
15	Mr R Venkateswara Rao	Determination of Calcium in a Fermentation Process by Proton Induced X-Ray Emission	IST (Taylor & Francis)	42 331-344	2014	1073 - 9149	1.2
16	Dr.P.Durga Sailaja	Fixed point results on ordered metric spaces via generalized altering distance function in four variables	JARPM	5(1) 143-158.	2013	1943 - 2380	
17	Dr.P.Durga Sailaja	Existence of common fixed points of generalized almost weakly contractive maps	PJMS	16(1) 71-86	2013	1598 - 7264	
18	Dr.P.Durga Sailaja	Coupled fixed points of contraction maps with a rational expression in partially ordered metric spaces	ASCM	23(3) 375-393	2013	1229 - 3067	
19	Dr.P.Durga Sailaja	A fixed point theorem in orbitally complete partially ordered metric spaces	Journal of Operators .(Springer)	73 8	2013	2314 - 5072	0.5
20	Dr.P.Tirumala	Influence of Physical working conditions on Quality of Work life in Steel Industry	IJMFMR	2(4)	2013	227-6788	
21	Dr.T.Haribabu	Teaching/Learning English as A Second Language In Mixed Ability Class Rooms- A Stimulating Challenge	IJELLS	2(3) 83-86	2013	2278 - 0742	
22	Dr.T.Haribab	Truth Is Always An Antidote For	IJEL	3(4)	2013	2249	

	u	Modern Ills: A Critical Study Of Vizai Bhaskar Ruthwik,		137-142		- 6912	
23	Mr. K.V. Narasimham	Convergence of Ishikawa Iteration Process for General Class of Function,	MTAM,	3(6) 133-135	2013		
24	Mr.K.V.Nara simham	Jacobian-Free accelerating convergence of successive approximation method for non-linear system of equations.	IJPAM	86(1) 83-94	2013		
25	Mrs.K.Jyothi	Socio psychological pressures in Ralph Elision's Invisible man and Rich and Wight's Natiuesm	58th AIETCES		2013		
26	Mr R Venkateswar a Rao	Trace Elemental Analysis of Indian Natural Moonstone Gems by PIXE and XRD Techniques	ARIE. (Elsevier)	82 211-222	2013	0969 - 8043	1.8
27	Mr R Venkateswar a Rao	Trace elemental analysis of south Indian natural east coastal beach sand deposits by Proton Induced X-ray Emission technique	IST. (Taylor & Francis)	41 406–427	2013	1073 - 9149	1.2

- **Number of papers published in peer reviewed journals (national / International) by faculty and students: 27**
- **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.): 05**
- **Monographs:** NIL
- **Chapter in Books:** NIL
- **Books Edited:** NIL
- **Books with ISBN/ISSN numbers with details of publishers:** NIL
- **Citation Index:** 06
- **SNIP:** NIL
- **SJR:** 05
- **Impact factor: 05**
- **h-index:** 05

20. **Areas of consultancy and income generated:** NIL

21. **Faculty as members in a) National committees b) International Committees c) Editorial Boards** Nil

22. **Student projects**

a) **Percentage of students who have done in-house projects including inter departmental/programme:** NIL

b) **Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies:** NIL

23. Awards / Recognitions received by faculty and students:
Faculty Awards/Recognitions:

S. No	Year	Name of the Faculty	Award /Recognition
1.	2012	Dr.T.HariBabu	Best NSS Programmer from JNTUK, Kakinada, A.P
2.	2015-16	Mr.K V Narasimham	Best Teacher by Institution
3.	2014-15	Mr.R.Venkateswara Rao	Best Teacher by Institution
4.	2013-14	Dr.P.Durga Sailaja	Best Teacher by Institution
5	2012-13	Dr.T.Haribabu	Best Teacher by Institution

Student Awards/Recognitions:

S. No	Year	Name of the Student	Award/Recognition
1	2012-13	Mr.P.V.N Varma (11KD1A0286)	University Topper Award from JNTUK

24. List of eminent academicians and scientists / visitors to the department:

➢ Dr.B.Pankaj Kumar, Scientist-E, IUAC, New Delhi, visited and delivered a Guest lecture on "Nuclear energy and its applications with specific reference to ^{14}C- Nature's Clock" on 29th December'2016.

25. Seminars/ Conferences/Workshops organized & the source of funding

a) National:

➢ Organized "One day workshop on Environmental Protection & Global warming" at Lendi Institute of Engg & Tech, Jonnada, Vizianagaram-535005, AP, INDIA, 28th Feb'2011 funded by A.P.Pollution Control Board.

b) International: NIL

26. Student Profile Programme/Course Wise:

Name of the Course/programme	Applications Received	Admitted	Enrolled	
			*M	*F
I B.Tech EEE	94	94	26	8
I B.Tech ECE	179	179	27	28
I B.Tech CSE	180	180	28	26
I B.Tech MECH	117	117	35	1

*M = Male *F = Female

27. Diversity of Students:

Name of the Course	% of students from the same state	% of students from other States	% of students from abroad
I B.Tech EEE	100	Nil	Nil
I B.Tech ECE	100	Nil	Nil
I B.Tech CSE	100	Nil	Nil
I B.Tech MECH	100	Nil	Nil

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.? Not Applicable

29. Student progression: Not Applicable

30. Details of Infrastructural facilities
   a) **Library:** Department Library has 77 volumes with several authors.
   b) **Internet facilities for Staff & Students:**
      Department has the following computing facilities: 45 systems with HP Make Intel Core 2 Duo high end Pentium System with Microsoft Window XP, etc. Each Computer in the laboratory has facility to access internet. The Lab is provided With UPS facility.
   c) **Class rooms with ICT facility:** One ICT Class room
   d) **Laboratories**

Lab Description	Major Instruments
English Communication Skills Lab	45 computer systems with multimedia.
Engineering Physics Lab	Stewart and Gee's tangent galvanometer, Travelling microscope, Spectrometer, Compound Pendulum, Sonometer, Torsional Pendulum, Thermistor, Optical Fiber, Planck's Constant etc.
Engineering Chemistry Lab	Hot air oven, Bacterial colony counter, Incubator, Electro plate, Octaslide viewer, Autoclave, Ph meter, Conductometer, Turbidity meter, Cloud& Pour Point, Redwood Viscometer, Say bolt Viscometer, Flash & Fire Point, etc.

   e) **Computers: 47 Printers: 3**

31. Number of students receiving financial assistance from college, university, Government or other agencies:

Name of the Course	The Number of students				Agency
	2015-16	2014-15	2013-14	2012-13	
I B.Tech (CSE)	87	86	43	51	**Govt**
I B.Tech (EEE)	72	45	70	63	**Govt**
I B.Tech (ECE)	79	87	66	50	**Govt**
I B.Tech (ME)	60	64	54	61	**Govt**
Total	298	282	233	225	**Govt**

32. Details on student enrichment programmes (special lectures / workshops / Seminar) with external experts:

Orientation Programs, Personality development Programs are conducted.

33. Teaching methods adopted to improve student learning:

1. Standard Black board presentation
2. Model presentation with assembled & dissembled working models
3. Power point presentation with LCD projector (For special topics)
4. NPTEL lectures

34. **Participation in Institutional Social Responsibility (ISR) and Extension activities:**

NSS, Swatch Bharath, Street Cause, Blood Donation Camps, Tree Plantation, Digital India, Beach Cleaning Programme, Etc.,

35. **SWOC analysis of the department and Future plans**

SWOC ANALYSIS
Strengths:
- Excellent infrastructure facilities with well equipped laboratories.
- Most experienced, well qualified and dedicated faculty.
- Suitable mentoring and proper counseling of students.
- Communication and Personality Development Programs for students
- Certified English language training programmes in collaboration with international universities like Cambridge University, Qualifications & Assessments International (QAI) UK, Colorado Heights University, UK (E-cONs(E-Let)), etc.,
- The skills of global language is enhanced for the students at the advanced levels by soft ware's like Socrative, Edmodo, Padlet (web 2.0 tool) etc.,
- Good & consistent academic results.
- Fine stacked library with good number of volumes.
- Well furnished classroom facilities with good ventilation.
- Good no. of research publications by the faculty.
- Responsive team work among Faculty.
- Student seminars for improving presentation skills.
- Ragging free and absolute disciplined environment.

Weaknesses:
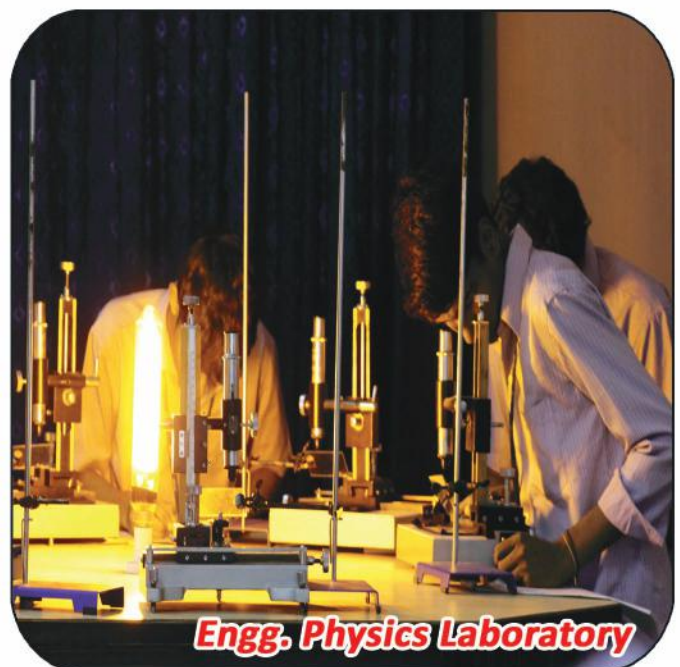- No research projects.
- Noconsultancy works.

Opportunities:
- Faculties are allowed to upgrade the skills by attending Faculty Development Programs and workshops.
- Opportunities to have national and international collaborations.
- Good encouragement from the management to improve strengths of faculty
- Healthy atmosphere in the campus to enhance skills of the faculty
- Career guidance programs to motivate students.

Constraints
- Unpredictable and declining quality of students may exert pressure on teachers.
- Most of the students are lagging in fundamentals.
- Majority of the students are from rural areas, they are lagging in Communication skills.

Science & Humanities Laboratories

English Language Communication Skills Lab Activity Hall

English Language Communication Skills Lab with CALL Facility

Engg. Chemistry Laboratory

Engg. Physics Laboratory

Declaration by the Head of the Institution

I certify that the data included in this Self-study Report (SSR) is true to the best of my knowledge.

This SSR is prepared by the institution after internal discussions, and no part thereof has been outsourced.

I am aware that the Peer team will validate the information provided in this SSR during the peer team visit.

Place: Vizianagaram

Date: 23rd January 2017

Signature of the Head of the institution
with seal:
PRINCIPAL
LENDI INST. OF ENGG. & TECHNOLOGY
Jonnada (V), Denkada (M),
Vizianagaram - 535005.

Certificate of Compliance
(Affiliated/~~Constituent/Autonomous Colleges and Recognized~~ Institutions)

This is to certify that <u>Lendi Institute of Engineering and Technology</u> fulfils all norms

1. Stipulated by the affiliating University, JNTUK.
2. Regulatory Council/Body [such as ~~UGC, NCTE,~~ AICTE, ~~MCI, DCI, BCI, etc.~~]
3. The affiliation and recognition is valid as on date.

In case the affiliation / recognition is conditional, then a detailed enclosure with regard to compliance of conditions by the institution will be sent.

It is noted that NAAC's accreditation, if granted, shall stand cancelled automatically, once the institution loses its University affiliation or Recognition by the Regulatory Council, as the case may be.

In case the undertaking submitted by the institution is found to be false then the accreditation given by NAAC is liable to be withdrawn. It is also agreeable that the undertaking given to NAAC will be displayed on the college website.

Date: 15-02-2017   **Dr. V.V. Rama Reddy**
Place: Vizianagaram   Principal/Head of the Institution

LENDI INSTITUTE OF ENGINEERING & TECHNOLOGY

(Approved by AICTE, New Delhi and Affiliated to JNTUK, Kakinada)
Jonnada (Village), Denkada Mandal, Vizianagaram-535005, Andhra Pradesh.
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www.lendi.org