## CRITERION VII INNOVATIONSAND BEST PRACTICES

## CRITERION VII INNOVATIONS AND BEST PRACTICES

#### 7.1 Environment Consciousness

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

The College has not formally opted for a Green Audit. But taking cognisant of the need for a eco- friendly campus , shady trees have been planted all over the campus and these have grown to aesthetic heights . In a few years from now the trees will be fully grown giving a green ceiling to the campus. The vehicle parking area is endowed with fully grown lush trees and a well maintained stretch of lawn with a lining of palm trees and bushes that add the scenic beauty of the college. These not only add to the frontage of the college but also contribute to carbon neutrality of the environment.

The reception lobby greets the visitors with soothing freshness of flowery plants and lawn.

Fittingly, a similar landscape has been set facing the chemistry lab.

Opting for Green Audit or Energy Audit is on the near future agenda of the college.





Lush Green Lawn and Shady trees





Indian Oleander (Nerium Indicum Mill)

Neem (Azadirachta indica)

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

The college is eco conscious and takes quite a number of initiatives to maintain an Eco –friendly campus.

The ensuing points bring forth the enterprising ideas of the college to preserve and conserve the environment.

#### **Energy Conservation**

• Energy Saving Stickers with the following captions are posted in Every classroom.by the Eco Club

## DO NOT LITTER SAVE ELECTRICITY SAVE WATER SAVE OUR EARTH WE HAVE NOWHERE ELSE TO GO

- Inefficient, aged and de-rated motors have been discarded and new motors commissioned
- Only Star rated air conditioners are installed in our college campus to ensure optimum consumption of electricity
- Speed regulators are provided in all transport vehicles
- Generator maintenance is done periodically to keep it ship-shape and ready for use.
- All computers are linked with TFT monitors only.
- Tungsten bulbs have been replaced with CFL bulbs inside the campus.
- LED bulbs will replace the fluorescent bulbs as and when the latter fuse out.

#### Water Harvesting

Rain water harvesting system is installed in Vivekananda Block.

#### Efforts for Carbon Neutrality

- Every building in the campus is surrounded by trees and lawns.
- Emission test certificates are mandatory for the vehicles in the campus.
- Cigarettes and tobacco products are strictly banned within the campus
- Vehicular movements are restricted inside the campus except a few VIP cars.
- A number of trees have been planted in the campus
- Maintaining a lush green lawns with palm trees and flowering bushes adds to strive towards carbon neutrality.

#### **Plantation**

Planting trees is an integral part of the activity of the ECO club and NSS of the college.

Last year .about 20 trees were planted in the Men's and Women's Hostel premises. The nourishing and watering of the saplings are taken care of by the ECO club members residing in the hostel. The college has under contract, Tamil Nadu Nursery garden, which maintains the expansive lawns.

#### Hazardous Waste Management

The everyday regular waste of the college does not include hazardous waste and the solid waste is handled by the usual methods.

#### E-Waste Management

The college follows reuse / recycle policy as far as the electronic items are concerned. The low end computers which can no longer be upgraded and used at the college but suitable for the type of work done in Velammal group of schools, are given away for reuse in the schools. The UPS batteries are recharged till the maximum number of cycles and once their life is over, exchanged by the suppliers / taken by recycle buyers. The life of the electronic

items is extended by proper maintenance and taking care of minor repairs by the lab technicians.

#### 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.

One of the main objectives of the college being promotion of research among staff and students, the institution extends all support for innovative activities.

Students and faculty members have been actively involved in funded projects and products of these projects have the potential for real time applications. A few examples are

- DC-DC Converter CSI fed BLDC Motor Drive 2010
- Development of Safe, Human powered and Low cost Multipurpose Machine for fireworks Industry at Sivakasi Cluster 2011
- Efficient e-waste management through coordinated web service using WS-Dependable space 2012
- Intelligent Automated Respiratory Monitoring and Control Unit using Lab VIEW – 2013
- Mechanized step in automatic flushing system without sensor and spring platform (include mobile urinals) -2014
- Low cost high efficient sugar cane peeler -2014

Such projects have been instrumental in

- Applying the classroom knowledge to take the 'lab to land'
- Creating a vibrant research atmosphere in the college
- Inculcating a spirit of design and discovery in the students
- Instilling the attitude of social responsibility and
- Launching of a Business incubator under MSME, fetching funds to the tune of `43 lakhs.

In addition, the above mentioned accomplishments have culminated in the **Inception of Center for Innovation and Product Development (CIPD) in** 2011 in the college the functions of which can be enumerated as

- 1. To bridge the gap between academic institution and the industry
- 2. To identify the requirements of industry
- 3. To give an open call for innovation competition that will address the problem or need of the common people
- 4. To identify funding agencies that will promote product development
- 5. To examine the viability for patenting and promoting the products in the market and
- 6. To involve staff and students from different years of study for break free research work and encourage participation in national and international level product design and development contests

## CIPD has been recently conferred the status of Business Incubator by Ministry of MSME, Government of India.

Such a bee hive of research activity has inevitably impacted the **teaching–learning process.** 

There has been paradigm shift in teaching methodology from the routine chalk and talk method to interactive modes such as lecture cum discussion, lecture cum demonstration, case studies, think-pair-share and the like to augment the out-of-the-box thinking of the students. Capacity building

of the teachers consummate with the diverse methods of teaching has been accomplished by organizing programs like Mission 10X.

Impetus has been given to E- learning using NPTEL and MIT Courseware and animation videos

Technical seminars and Mini-Projects have been introduced in every semester to instil analytical thinking, innovative attitude and creativity.

Value added courses have been augmented to lend support to the knowledge acquirement.

The library has been restocked with relevant books and journals- both paper and electronic forms.

Auditing and completing Business English Certificate Program has been made mandatory for the second years.

Slow learners' capacity is boosted by coaching and improvement classes and effective mentoring by the mentors.

The college working hours have been extended to 5.30 P.M., the period from 4.05 P.M. to 5.30.P.M. exclusively allotted for project work, value added courses, BEC classes, coaching classes and other Placement training programs.

The natural outcome of such an augmentation in the teaching —learning process is reflected in the progression of the students towards **higher studies** and **Placement.** 

The extended hour is also put to use to train the interested students in competitive and qualifying examinations like GATE, GRE, TOEFL etc. This motivates and equips the students to migrate to institutions of repute for higher studies.

Training for campus recruitment has been intensified and the training begins from the first year of entry when the students are exposed to time – bound answering general and mathematics aptitude questions. The second year sets the pace for language and communication skills development and from the third year onwards focused training for Group discussion, mock interviews and facing technical aptitude tests.

The college is therefore continuously geared towards multifaceted approach for overall development of the students and staff members.

#### 7.3 Best Practices

## 7.3.1 Give details of any two best practices which have contributed to better academic and administrative functioning of the College.

The Institution can proudly proclaim that it has more than two best practices; however the following two best practises have been chosen to show case the achievements of the college:

- 1. Inculcation of Research Culture among Faculty and Students
- 2. Placement and Training (Career Development)

#### **Best Practice 1:**

#### Title: Inculcation of Research Culture among Faculty and Students

A Research Committee constituted in the college functions with the following *Goals:* 

- To inculcate the culture of research among faculty and student
- To identify the emerging and thrust areas of research and disseminate the information to staff and students
- To stimulate the faculty to initiate the work in the chosen area of interest and involve students in the project

- To motivate the faculty to present the findings in reputed journals / National / International Conferences and refine the on- going research work
- To stimulate the faculty and student to present/ publish the research papers in national / international conferences /reputed journals
- To encourage faculty use this opportunity to work towards a Ph.D. degree
- To give impetus and assistance to faculty to apply to funding agencies like AICTE, DST and DRDO for furthering their research work
- To kindle interest in students for active involvement in short duration and long duration projects.
- To uplift research work to the level of patenting
- To liaise with the management for procuring and establishing optimal infra-structure facilities required for research
- To identify thrust areas to know the individual research interest

#### The Context:

Gone are the days when academicians can sit in ivory towers and look down upon lesser mortals. The current demand of the society is for the learned to come down to earth and return to the society what they have received in a more beneficial form. To whom is this demand valid for if not the Engineers!

The repute of any educational institution rests on teaching – learning process and R & D activities. R & D as we all know refers to Research & Development – Research therefore is the back bone for the development of the students, teachers and the Institution

The college being conscious of this state of affairs, has been giving dynamic thrust towards developing and augmenting the research activities of the college to keep abreast of the advances in the fields of Engineering & Technology. Inculcating research aptitude in faculty members and students has taken priority almost equal to the teaching-learning process. The competency of the students to face the challenges of the society at the end of their four-year tenure will be enhanced not just by their grades and ranks but the ability to apply their knowledge, analyse the problem, synthesize a solution an devaluate the outcome. These skills are developed by working on real time projects during their academic career. In order to direct the students along these lines, the faculty also have to be fully equipped in planning and guiding research. Just as much as the teaching learning process is a partnership between the teacher and the student, so also is the research and development process in which the guide and the researcher have equal role to play.

The outcome of research should be relevant to the societal needs and a section of the society at least should be direct beneficiaries. Therefore, taking up research activities shapes a person with moral responsibility and a value system that enhances his/ her commitment towards fulfilling the needs of the society.

Thus the college wishes to show- case the R&D activities of the college as on of the best practices.

#### The Practice:

The contextualization of the above is effected by the following practices:

- Faculty pursuing Ph.D and with Ph. D. degrees are encouraged to attend and present papers in national and international conferences to get exposed to recent and emerging trends in their fields of interest.
- To facilitate the same, the management extends financial assistance to the tune of 50% towards TA, DA and registration fee. On duty leave can be availed by the teachers for such participations. These provisions are also extended to students for participations in seminars/ symposia/ project contests etc.
- Teachers with Ph.D. are given monthly financial allowance of `10000/ to help meet expenditure towards furthering their research work
- Concession in weekly work load up to six hours is offered to faulty working on funded projects.
- External experts from bodies like DST and DRDO are invited to address the faculty to give assistance in preparing a project report to be submitted for funding.
- Seed money is provided to carry out work necessary preliminary work to enhance the probability of receiving funding
- Eminent researchers are invited to campus for delivering lectures during National and International seminars/ workshops/ conferences organized by the various departments in the college to boost the knowledge level of the faculty and the students.
- Faculty can apply to the management for travel, boarding and lodging allowances to visit reputed research laboratories and funding agencies like AICTE, DST and DRDO either to submit their proposals in person or follow up the submitted proposals.
- As a part of the curriculum prescribed by the Anna University. The final students have to take up and complete project work. Turning this to the advantage of students, the nature of project work assigned to the students is of quality and sometimes a portion of the research work carried out by the faculty members. Such a practice lifts the level of the students to a higher platform of knowledge domain.
- Winners in project contests are rewarded with equal prize money by the management during Annual College Day celebrations as recognition to the work of the student and as a motivation to the others to follow suit.
- Memorandums of Understanding have been signed with many industries / agencies and such a practice plays a vital role in interaction of faculty and students with the industries and design projects in collaboration with them.
- The idea of Interdisciplinary projects has been promulgated and this has caught on by the students and faculty.
- CIPD has been set up which has culminated in establishing a Business Incubator bagging fund to the tune of `43 lakhs.

#### Evidence of Success:

• Eight departments have been recognized as research centers by Anna University. Chennai.

- 13 faculty members have been conferred with Ph. D in the last five years and 20 faculty members are actively engaged in pursuing the degree.
- Funds to the tune of `3.26 crores have been received by different faculty members from various funding agency which is boast -worthy for a growing institution like ours.
- A whooping amount of `14.9 lakhs has been disbursed by the Management as equal prize money for the students who have won prizes in project contests and proto type development in the last five years.
- Projects worth `0. 60 crore have been completed and results reported to the funding agencies; Projects worth `2.32 crores are on-going and projects worth `0.31 crore have been submitted for funding.
- The above projects include interdisciplinary research work of IT & and Mechanical faculty and CIVIL & ECE faculty
- The department of Chemistry has extended help and expertise to students of CIVIL and Mechanical Engineering for part of their project work / working of built contraptions.
- Such a track record has reflected in the campus placement record of students.

#### .Problems Encountered and Resources Required:

- 1. Sustained motivation of students and faculty is always a challenge
- 2. Time constraint is a spoke in the wheel, in planning and execution of research specially during formative and summative assessment processes and when ad hoc responsibilities are assigned.
- 3. More generous seed money / advance from the management for preliminary work or while awaiting funds from agencies is always welcome.
- 4. Prompter reply from funding agencies will be encouraging.
- 5. If the funding agencies can point out the reason for rejecting the proposal or offer suggestions for improvement, it will go a long way in the development to faculty and hence the students.

#### **Best Practice 2:**

#### Title: Training & Placement

#### Goals:

- To persuade the students to possess a sound technical knowledge in the area of study
- To enhance the programming skills of students
- To train the students in time- bound answering of aptitude tests
- To help students excel in language and communication skills
- To prepare the students for different levels of selection process such as group discussions and one-to- one interviews
- To help boost the students' confidence level through soft skills trianing
- To inculcate the importance of projecting a smart appearance
- To groom the students to the corporate level
- To ensure that all eligible students are employed by the end of the final year of study

#### The Context:

The Nation, specially Tamil Nadu has witnessed a massive inclination towards Engineering Education in the past years and the trend has not let off. One of the major reasons for this preference is the employment opportunities the IT and other corporate sectors have been able to offer to fresh graduates with lucrative pay packets. With more than 550 Government and private Engineering colleges and deemed to be universities offering professional education, if an institution has to find a place of repute, it has to be different and it has to be elite in terms of academics and in terms of training it offers to enable the students graduate successfully with a job offer in hand. If not the very survival of the institution is put under a question mark. In this context, it has become imperative for a reputed institution like ours to ensure to the level best, that its primary stake holders are satiated with respect to their expectations.

Our Management being not new to this aspect of success has had a pointed focus on the training the students for campus placement from the first batch of students onwards. Within a short period, a placement has been established with an experienced Placement Officer in charge. Since then the placement process of the college has taken a leap towards successful placement of students.

#### The Practice:

The campus recruitment comes under the purview of the placement officer. The placement officer is assisted by a team of Placement coordinators drawn from each department – one faculty member and two student members. This team plans and coordinates the activities related to placement training.

At the end of the third year, students are given the choice to opt for campus placement, the other choices being progression to higher studies/aiming to be an entrepreneur. The choice of the student is endorsed by the parent / guardian in writing. This choice stream lines the student towards his. her future. The Intensive placement training is offered only to those who have opted for campus recruitment. It is worth mentioning that till the third year all students undergo the common training programs irrespective of the options they may be choosing. Such an approach to the training programs ensures that all students get quipped to employability to a certain extent.

The time table incorporates the periods allotted for accommodating these sessions- 4.05 to 5.30 P.M. every day.

A systematic and scientific approach has been developed for effective training of the students towards campus recruitment. The process chart below demonstrates the steady build-up of skills required for direct campus recruitment.

### Trianing in Mathematical and general aptitude tests Step I towards enhancing language skills I year · Step II towards enhanceing languga and communication skills -Auditing and/or completing business English Certificate Course Communciation Skill development . Mathematical Aptitude training II YEAR \*Training in programming Skills Intensive Training in Programming Skills Intensive training in numerical Skills (oriented towards company specific requirement) III YEAR Intensive training in Group Discussion In Facing techincal Interviews In Facing HR interviews

To augment the training given by the faculty of the college resource persons of repute are brought in to enhance the skills of the students.

- External experts from PAC training Academy, Chennai and Learn Well Chennai are invited to render soft skill training to the students
- Special sessions for General aptitude training are handle by trainers like Mr. Eldo Ranjith of T.I.M.E and experts from institutions like FACE and SMART
- On- line placement tests are taken up the students on a regular basis to enhance aptitude, mental ability and reasoning skills of the students.

The college emphasizes on the dress code of students as part of grooming the students. The students should strictly adhere to the dress code -

Boys – formals with shirts neatly tucked in with formal belts, formal black shoes with black socks. They should not sport a beard and hair should be neatly cut.

Girls- formal salwar –kameez / chudithars with neatly plaited hair, black shoes and black socks.

On all college occasions and definitely at the time of campus recruitment the students are required to wear the college blazer.

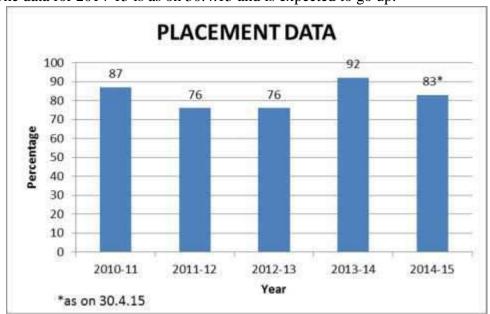
The following should also find a place in this context

Campus placement includes non IT sector companies – the companies / industries that recruit students, branch wise. The placement cell takes all efforts to place students in core companies and if the companies do not come down to Madurai, students are taken to campus interviews scheduled in

Velammal Engineering College, Chennai. Also off campus interviews in industries are planned by the placement officer exclusively for students of Velammal College of Engineering & technology.

#### Evidence of Success:

All the efforts of the college bear fruits and the college has registers a note-worthy placement record. The following bar chart picturizes the data. The data for 2014-15 is as on 30.4.15 and is expected to go up.



#### Problems Encountered and Resources Required:

- Number-wise top recruiting companies that come for campus selection demand for Day 1 and this demand is very difficult to meet
- ➤ Companies that offer dream packages claim priority over other companies zero day for campus recruitment
- Although certain companies are willing to offer week-end internships spreading over two or three months, due to tight academic schedule, financial constraint on the part of the students, unviable commuting distance etc., students are not able to utilize such opportunities
- ➤ Personnel with expertise in aptitude tests and in developing soft skills can permanently be employed for continuous training of the students

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# EVALUATIVE REPORT OF ENGINEERING DEPARTMENTS

## EVALUATIVE REPORT DEPARTMENT OF CIVIL ENGINEERING

 $\textbf{1.} \ \ \textbf{Name of the department} \ : \ CIVIL \ ENGINEERING$ 

#### **VISION:**

To create competent Civil engineers to evolve as dynamic participants in the infrastructure development.

#### **MISSION:**

- 1. Become a nexus for high quality Civil engineering education and research.
- 2. Provide education that keeps the students updated on the happenings of the global Civil community.
- 3. Maintain an intellectually challenging, yet supportive environment.

2. Year of Establishment : 2011

- **3. Names of Programs/Courses offered** : UG: B.E (Civil Engineering)
- 4. Names of Interdisciplinary courses and the departments/units involved: NIL
- 5. Annual/ semester/choice based credit system (programme wise) -- Semester
- 6. Participation of the department in the courses offered by other departments  $\rm NIL$
- 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	1	2
Associate Professors	2	0
Asst. Professors	9	9
TOTAL	12	11

## 10. Faculty profile with name, qualification, design, specialization (D.Sc./D.Litt./Ph.D./M. Phil. etc..)

S.No	Name	Qual	Designati	Specialization	No.of	No.Ph.D
		ificat ion	on		Years of Experi	Students guided for the last 4 years
					ence	last 4 years
1.	Dr.L.Andal	Ph.D	Professor & Head	Structural Engineering	19	2
2.	Dr.K.S.Jinesh Babu	Ph.D	Professor	Water Resources	5	Nil
3.	Dr.T.Naveen Raj	Ph.D	AP 3	Geology & Remote Sensing	3	Nil
4.	Dr. G.Sridhar	Ph.D	AP 3	Geotechnical engineering	0	Nil
4.	Mr.A.V.Deepan Chakravarthi	M.E	AP 3	Structural Engineering	4	Nil
5.	Mr.P.Ayyanar	M.E	AP 3	Structural Engineering	6	Nil
6.	Mr.M.Sathish	M.E	AP 3	Structural	3.5	Nil

	Kumar			Engineering		
7.	Mrs.S.Sethukk arasi	M.E	AP 3	Environmental Engineering	3.5	Nil
8.	Ms.M.Pradeepa		AP 3	Structural Engineering	3	Nil
9.	Mr.M.Sathyana rayanan	M.E	AP 3	Structural Engineering	1.8	Nil
10.	Ms.N.Nirkkuna	M.E	AP 3	Structural Engineering	1	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): 15:1
- **14.** Number of academic support staff (technical) and administrative staff; sanctioned and filled

	Sanctioned	Filled
Academic support staff (Technical)	2	2

#### 15. Qualifications of teaching faculty with D.Sc/ D.Litt/ Ph.D/ MPhil/PG.

NAME OF FACULTY	HIGHEST QUALIFICATION	PRIOR QUALIFICATION
Dr.L.Andal	Ph.D	M.E
Dr.K.S.JineshBabu	Ph.D	M.E
Dr.T.Naveen Raj	Ph.D	M.Sc, M.Tech
Dr. G.Sridhar	Ph.D	M.Tech

## 16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received

#### a) National:

S. No	Name of the Faculty	Title of the Project	Funding Agency	Grants Received (Rs. in Lakhs)	Duration
1.	Dr.L.Andal	Conductive Concrete Blocks from Industrial Waste as electromagnetic Shielding material	DST	27.59	3 years

- b) International: 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: -
- 19. Publications (last 4 years):

Publication per faculty: 4.7

S.No	Name of the Faculty		raphs	_	edited			SNIP (Sour ce) Norm alize d		No.of Publica tions with Impact Factor	Publi catio ns
						details					
1	Dr.L.Andal	-	-	-	-	-	-	-	-	1	1
2	Dr.K.S.Jinesh	-	1	1	-	1	-	-	-	3	6
	Babu										
3	Dr.T.Naveen	_	-	-	-	-	-	-	-		3
	Raj										

- **20.** Areas of consultancy and income generated: Rs. 50,000 for Cube compression tests for various organizations like
- UNIKANS Construction Pvt Ltd,
- KVT Concrete
- SCM Silks Pvt. Ltd, Madurai,
- SakthiRoofng and Ceiling, Chennai 92
- Karthiya Construction
- Palanichamy Bricks, Panaiyur, Madurai.
- Hayakriva Associates & Builders
- Chettinad Integrated Builders Pvt. Ltd, Dindigul
- Thiagarajar School of Management, Thirupurankundram, Madurai.

#### 21. Faculty as members in

a) National committees b)International Committees c) Editorial Boards d) Board of Studies Anna University - NIL

#### 22. Student projects

- a) Percentage of students who have done in-house projects including inter departmental/programme : 98%
- b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/otheragencies: 2%

#### 23. Awards/ Recognitions received by faculty and students NIL

#### 24. List of eminent academicians and scientists/ visitors to the department

S.No	Year	Name of the	Designation	Organization	Purpose of
		academician			Visit
1	2012-	Mr.B.Saravanan	GIS Analyst	Kcube	One day
	13			Consulting	workshop on
				Services,	"Open
				Chennai	source
					Quantum
					GIS"
2	2013-	Dr.V.Saraswathi	Senior	CSIR-Central	Two days
	14		Principal	Electrochemical	National
			Scientist	Research	Level
				Institute,	Seminar on
				Karaikudi	"Recent
				Tamil Nadu	Trends in
3		Dr. Jolly Annie	Assistant	Structural	Corrosion
		Peter	Director	Engineering	Studies"
				Research Centre,	
				CSIR Campus,	

				Taramani,	
				Chennai	
4		Mr.R.Kannan	Project	Trimble Pvt Ltd,	Hands on
			Manager	Chennai	training
					"Total
					Station"
5	2014-	Dr. S. Nagan	Associate	Civil Engineering	Workshop on
	15		Professor	Department,	"ANSYS"
				Thiagarajar	
				College of	
				Engineering,	
6		Mr. L. Balaji	Charted	Balaji &	Guest
			Civil	Associates,	Lecture on
			Engineer	Madurai	"Principles
					of
					Valuation"

## 25. Seminars/ Conferences/Workshops organized & the source of funding a) National

S.No	Year	Name of the	Date(s)	Source of	Amount
		Seminar /		Funding	spent (Rs.)
		Conference			
1.	2012-	One day	23.01.2013	Management	36, 857
	13	workshop on			
		"Open source			
		Quantum GIS"			
		Seminar on	09.10.13 &	CSIR	57,678
		"Recent Trends	10.10. 13		
		on Corrosion			
		Studies"			
2.	2013-	Hands on training	22.03.2014	Management	17,920
	14	"Total Station"			
3.	2014-	Workshop on	13.08.2014	Management	7,760
	15	"ANSYS"		_	
		One day State	23.08.2014	Sponsors	55,638
		level paper		_	
		presentation			
		contest			

#### b) International: NIL

26. Student profile programe/course wise:

Year	Name of the	Application	Selected	Enrolled		Pass Percent
1 ear	Course	received	Selected	Male	Female	age
2011 -15	B.E	71	71		56 15	94.37
2012 -16		70	70		47 23	NA

#### 27. Diversity of Students

299

Year	Name of the Course	% students from the same State	% of students from other State	% of students from abroad
2011-	B.E	100	NIL	NIL
12				
2012-		100	NIL	NIL
13				
2013-		100	NIL	NIL
14				
2014-		100	NIL	NIL
15				

## 28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?

	Name of the Competitive examination		
	GATE	GRE	TANCET
No. of students qualified	1	1	14

29. Student progression

Student progression	Against % enrolled
UG to PG	16.9
PG to M.Phil.	NA
PG to Ph.D.	NA
Ph.D. to Post-Doctoral	NA
Employed	
Campus selection	22.5
Other than campus recruitment	28.16
Entrepreneurship/Self-employment	7.04

#### 30. Details ofInfrastructural facilities

a) Library:

No. of.books available	Capacity
307	10

- b) Internet facilities for Staff & Students: Yes
- c) Class rooms with ICT facility: Two class rooms (G7,G8) are equipped with LCD Projectors.

#### d) Laboratories:

S.No	Name of the laboratory	Area (Sq.m)	Capacity
1	Survey Lab	100	35
2	CADD Lab	100	35
3	Strength of Materials Lab	200	35
5	Hydraulic Engineering Laboratory	200	35
6	Concrete and Highway Engineering Lab	200	35
7	Soil Mechanics	200	35

300

	Laboratory		
8	Environmental Engineering Laboratory	200	35

## 31. Number of students receiving financial assistance from college, university, government or other agencies:

V / O				
Year	No. of students receiving scholarship from			
	College University Government Other agence		Other agencies	
2012-13	-	-	33	-
2013-14	-	_	63	-
2014-15	_	-	87	-

## 32. Details on student enrichment programmers (special lectures / workshops / seminar) with external experts:

Year	Program	Nature of program
2012-13	Open source Quantum GIS	Workshop
2013-14	Total Solution	Hands On Training
	Recent trends in Corrosion Studies	Seminar
2014-15	'ANSYS'	Workshop

#### 33. Teaching methods adopted to improve student learning

Lecture with discussion; Lecture with Illustration; Lecture with animated videos; lecture with demonstration; Collaborative learning; Problem solving; Group discussion and role play

## 34. Participation in Institutional Social Responsibility (ISR) and Extension activities

Year	Sports	NSS
No. of students participated	45	10

#### 35. SWOC analysis of the department and Future plans

#### **Strengths:**

- 1. Frequent conduct of Workshops and Seminars.
- 2. Active participation of Students and Faculty in research activities
- 3. Regularity in attendance among faculty and students
- 4. Experienced faculty.
- 5. Training of Students for competitive exams.

#### Weakness:

- 1. Not noteworthy level of Consultancy work.
- 2. Lack of interdisciplinary projects.
- 3. Lack of adequate industry institute interaction..

#### **Opportunities:**

- Add on subjects under self-learning scheme with the guidance of experience faculty
- 2. Orientation and faculty development programs for new faculty
- 3. Faculty participation in consultancy and research work.
- 4. Participation of students in extracurricular activities

#### **Challenges:**

- 1. Enhancing lab facilities to meet the requirements of quality research.
- 2. Students with diverse background.
- 3. Adaptation for the changing technology.

#### Future plans of the department.

- Interaction with industries, 1.
- To introduce new PG course on "Structural Engineering"
  To offer best consultancy services.
  To upgrade the department as research Centre.
  To procure more funded projects. 2.
- 3.
- 4.
- 5.

#### **EVALUATIVE REPORT**

#### DEPARTMENTOF COMPUTER SCIENCE AND ENGINEERING

1. Name of the department : Computer Science and Engineering VISION

To become a center of excellence in the field of Computer Education and Research.

#### **MISSION**

- To produce globally competent and technically well-equipped computer professionals
- To cultivate the spirit of ethical values for the cause of development of our nation, in the students.
- 2. Year of Establishment : 2007
- 3. Names of Programmes / Courses offered (UG, PG, Ph.D.)

Sl.No	Name of the Programme	Year in which started
1	UG: Bachelor of Engineering in CS&E	2007-08
2	PG: Master of Engineering in CS&E	2012-13
3	PhD: PhD in Information and	2014-15
	Communication Engineering (CS&E)	

- 4. Names of Interdisciplinary courses and the departments/units involved: Nil
- 5. Annual/semester/choice based credit system (programme wise): Semester.
- 6. Participation of the department in the courses offered by other departments

S.No.	Subject Name	Department
1	Object Oriented Programming, Object	EEE
	Oriented Programming, lab, Computer	
	Networks, Operating system	

- 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

or reaching posts		
	Sanctioned	Filled
Professor	3	3
Associate Professors	6	2
<b>Assistant Professors</b>	19	19

10. Faculty profile with name, qualification, designation, specialization:

Name	Designation	Qualification	Specialization	No. of Years of Experience	No. of PhD Students guided for last 4 years
Dr. P. Alli	Professor & Head	M.E.,Ph.D	Digital Image Processing	21	Nil
Dr. S. Poonkuntran	Professor	B.E., M.Tech.,Ph.D	Information Security	10	Nil
Dr. R. Kavitha	Professor	M.E.,Ph.D	Software Testing	16	Nil
Dr. R. Deepalakshmi	Professor	M.E.,Ph.D	Computer Networks	15	Nil
Mr.G.Vinoth Chakkaravarthy	Asst. Prof	M.E	Network Security	12	NA

Dr. A. BazilaBanu	Asst. Prof	M.E.,Ph.D	Data Mining	10	Nil
Mrs. C.B. Selva Lakshmi	Asst. Prof	M.E.,M.B.A	Computer Networks	11	NA
Ms. S. PadmaDevi	Asst. Prof	M.E	Computer Networks	6	NA
Mrs.J.V. Anchitaalagammai	Asst.Prof.	M.E	Adhoc Networks	9	NA
Dr. S. Suriya	Asst. Prof	M.E.,Ph.D	Data Mining	4	Nil
Mr.P.N. Karthikayan	Asst.Prof.	M.Tech	Information Technology	5	NA
Mr. Mallikarjuna Nandi	Asst.Prof.	M.E	Wireless Technologies	3	NA
Mr.K. Azarudeen	Asst.Prof	M.E	Compiler Design	8	NA
Ms. J. Shanthalakshmi Revathy	Asst. Prof	M.E	Data Mining	7	NA
Ms. S. Kavitha	Asst. Prof	M.E	Computer Networks	3	NA
Ms. M. Salomi	Asst. Prof	B.E.,M.Tech	Computer Programming	3	NA
Mr. K. S. Seetharaman	Asst. Prof	M.Tech	Information Technology	3	NA
Ms. M. Ariya	Asst. Prof	B.Tech.,M.E	Computer Networks	3	NA
Mr. S. Samsudeen	Asst.Prof.	M.E	Computer Networks	5	NA
Mr. S. Kharthikeyan	Asst.Prof.	M.E	Computer Networking	1	NA
Mrs. P. Aileen Chris	Asst.Prof.	M.E	Information Technology	6	NA
Ms. R. Sarala	Asst.Prof.	M.E	Computer Programming	5	NA
Mrs. G. Mohana Priya	Asst.Prof.	B.Tech.,M.E	Digital Image Processing	4	NA
Mr. S. Murali	Lecturer	B.E	Computer Programming	5	NA
Ms. V. Lavanya	Lecturer	B.Tech	Information Technology	2	NA

<sup>11.</sup> List of senior visiting faculty: Nil

<sup>12.</sup> Percentage of lectures delivered and practical classes handledby temporary faculty:Nil

<sup>13.</sup> Student -Teacher Ratio (programme wise) : UG - 17:1PG -12:1

<sup>14.</sup> Number of academic support staff (technical) and administrative staff; sanctioned and filled

	Sanctioned	Filled
Academic Support Staff (Technical)	6	6

15. Qualifications of teaching faculty with D.Sc/ D.Litt/ Ph.D/ M.Phil / PG.:

Highest Qualification	Prior Qualification	Number of Faculty Members in the Department
Ph.D	M.S	1
Ph.D	M.E /M.Tech	4
M.E	M.B.A	1

- 16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received: 03
- 17. Departmental projects funded by DST FIST;UGC,DBT,ICSSR, etc. and totalgrants received:

S.No.	Name of the Investigators in the	Funding	Amount received in
S.1NO.	Dept.	Agencies	Lakhs
1.	Dr. P.Alli(PI) ,Mr.G.Vinoth	DST	16.9
	Chakkravarthy (Co-PI)		
2	Dr.S.Poonkuntran (Co-PI)	DRDO	21.4

- **18. Research Centre /facility recognized by the University:**Anna University Chennai, 2014-15.
- 19. Publications:
  - > Publication per faculty: 11.08
  - > List of publications

S. No	Name of faculty	Total Publicati ons	Citati on Index	SNI P ind ex Av g	SJR Av g	Publicat ion With impact factor	Publicati ons listed in internati onal database	h- ind ex
1.	Dr. P. Alli	36	23	0.5	0.2	5	19	3
2.	Dr.S.Poonkuntran	17	5	0.6	0.2	8	9	4
3.	Dr. R. Kavitha	34	24	0.8	0.2	11	13	24
4.	Mrs. R.	44	23	0.9	0.2	16	16	3
5.	Mr. G.	9		0.6	0.1	4	4	
6.	Mrs.A.Bazila Banu	7		0.7	0.2	4	2	
7.	Mrs. C.B.	7				5	5	
8.	Mrs. S. Padmadevi	4				2		
9.	Mrs.J.V.Anchitaala	7	-			4	4	
10.	Mrs. S. Suriya	32	19	0.7	0.3	9	9	4
11.	Mr. P.N.	5	-	-	-	3	-	-
12.	Mr. Mallikarjuna	2	-	-	-	3	-	-
13.	Mr. K. Azarudeen	5	-	-	-	2	-	-
14.	Ms. J.	9	-	-	-	2	-	-

15.	Ms. S. Kavitha	4	-	-	-	2	-	-
16.	Ms. M. Salomi	5	-	-	-	-	-	-
17.	Ms.M.Ariya	2	-	-	-	-	-	-
18.	Mr.K.S.Seetharama	3	-	-	-	-	-	-
19.	Ms.R.Sarala	2	-	-	-	-	-	-
20.	Mrs.G.Mohana	2	-	-	-	-	-	-
21.	Ms.P.Aileen Chris	12	-	-	-	1	-	-
22.	Mr.S.Kharthikeyan	2	-	-	-	-	-	-
23.	Mr.S.Samsudden	7	-	-	-	-	-	-
24.	Mr. S. Murali	9	-	-	-	3	4	-

#### **Books Published**

- S.Poonkuntran, The contribution on Innovative Teaching Methodologies- Group Activity under the title "Properties of Algorithms" has been selected and published in "Integrated Innovations+" by Wipro Mission 10x, Wipro Technologies.
- Dr. S.Poonkuntran, "Image Authentication using Watermarking- A Guide for Researchers", Printed by Jayalakshmi Publications, Madurai. March 2015, ISBN: 9789384193256.
- 20. Areas of consultancy and income generated :Computer Assembling to the value of Rs.5,50,000/-
- **21. Faculty as members in**a) National committees b) International Committees c) EditorialBoards: 02
- **22. Student projects:** a)Percentage of students who have done in-house projectsincluding interdepartmental/programme 95%
  - b) Percentage of students placed for projects in organizations outside the institution i.e. in research laboratories /Industry / other agencies -5%

23. Awards / Recognitions received by faculty and students

S.No.	Awards/Agency Title Facult		Faculty / Students
			Name
	The Institute of	Development of ground station with	Mr. K. Abraham
	Engineers(India)	wireless telemetry	Mr. A. Sri
1.	through "The		Venkateshwaran
1.	institution of		(2010 – 14 batch)
	Engineers(India)		Mr. S. Vikramraj
	R&D Grant-in-		(2011 – 15 batch)
	aid Scheme"	Development and Designing an	Ms. S. Sree Naga
		Ergonomic Computer Mouse	Gowri,
2.			Ms. S. Sree Naga
۷.			Vani,
			Ms. S. Sri Nandhini
			(2012 - 16  batch)
3.	ISTE	Best Student Award	Ms.R.Sneha
			(2009-13 batch)

24. List of eminent academicians and scientists / visitors to the Department

S. No.	Academicians Scientists /Visitors	Designation/Organization	Name of the Program
1.	Mr. Mannar Mannan	Environmental Scientist,	Seminar on
2.	Mr. Raj Mohan	Director	Seminar on
3.	Mr. M. S. Nagarajan	Technical Head,	Seminar on
4.	Mr.Neethithevan	Assistant Professor (Sr. Grade), Mepco Engineering College,	Guest Lecture
5.	Dr.M.Shanmuga Sundaram	Associate Professor,	ISTE Seminar
6.	Mr.	President, Kannathasan	National level
7.	Dr. Appavu @BalaMurugan	Prof & Research Head/CSE,	National Level
8.	Mr.ParthasarathiGovindan	Test Pro System	Workshop on Testing
9.	Mr. Jagatheeswaran	Test Pro System	Workshop on Testing
10	Mr.Murali Jeyaraman	MD of Test Pro System	Workshop on Testing
1.1	Dr.S. Rajaram	Associate Professor, TCE,	National Level
1.	Mr. D.J.C. Barnes	PR and Placement Officer,	Seminar on
14	Mr. B.S.Ananth	Technical Manager,	National level
12	Mr. A.Alfred Raja Nelvin	Assistant Professor,	Workshop on NS-2
13	Mr.V.Vivek	Assistant Professor,	Workshop on NS-2
14	Dr.S.Jeyabharathi	Associate Professor,TCE,	Guest lecture

25. Seminars/ Conferences/Workshops organized & the source of funding

SI.No	Seminars/conferences/workshops organized	Funding Agencies
1	One-Day National Level Seminar On SUSTAINABLE E& I	CSIR
1.	WASTE MANAGEMENT	CSIK

26. Student profile programme/course wise:

Name of the	Applications	Selected	Lateral	Enrolled	Pass
Course/programme	received		Entry	*M *F	percentage
2007-2011	60	56	9	32 24	97
2008-2012	60	63	9	20 43	98.6
2009-2013	60	56	8	14 42	96.8
2010-2014	60	57	9	15 42	89.4

27. Diversity of Students:

Name of the course	Percentage of students from same state	Percentages of students from other state	Percentage of the students from abroad
B.E- CSE	100	-	-
M.E-CSE	100	-	-

28. How many students have cleared national and state competitive examinations suchas NET, SLET, GATE, Civil services, Defense services, etc.?

Batch	2007-11	2008-12	2009-13	2010-14
No. of Students	GATE-2	-	GRE-1, TOFEL-1	GATE -1, GRE-1,

29. Student progression

Student progression	2007-2011	2008-2012	2009-2013	2010-2014
UG to PG	8	11	8	14
PG to Ph.D.	1		-	-

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Ph.D. to Post-Doctoral	-	-	-	-
Employed				
<ul> <li>Campus selection</li> </ul>	42	30	32	29
• Other than campus	14	12	5	06
recruitment				
Entrepreneurship/Self-	1	1	-	02
employment				

#### 30. Details of Infrastructural facilities

#### a) Library

Area of	Seating	Working hours	Total No of Text	Total No of
Library	capacity		Books	Specimen Copy
24Sq.m	10	09.00 A.M to	200	200
		05.30 P.M		

#### b) Internet facilities for Staff & Students

S.No	Description of the	Computing facilities Available				
	Room/Laboratory	Server	Wi-fi			
	Server Room	4	-	Yes	Yes	
1.	UG Lab-1	01	87	Yes	Yes	
2.	UG Lab-2	-	65	Yes	Yes	
3.	UG Lab-3	-	56	Yes	Yes	
4.	PG Lab	-	21	Yes	Yes	

## c) Class rooms with ICT facility: 6 Class Rooms with LCD Projector Facility and WiFi Connectivity.

#### d) Laboratories

Name of the Laboratory	<b>Total Amount in Lakhs</b>	Capacity(inSq.m.)
Server Room	33.34	42.36
UG Lab-1	22.30	218.5
UG Lab-2	16.17	177.5
UG Lab-3	13.95	163.8
PG Lab	36.79	36.79

## 31. Number of students receiving financial assistance from college, university, Government or other agencies

S.NO	YEAR	BC/MBC/DNC	SC TUITION FEE
		SCHOLARSHIP	REFUND
1	2010-11	33	12
2	2011-12	34	12
3	2012-13	46	17
4	2013-14	35	29
5	2014-15	90	35

## 32. Details on student enrichment programmes (special lectures / workshops /Seminar) with external experts

750mmar) with external experts					
Name of the	Date	ResourcePersons			
program					
Guest Lecture	27.06.11	Mr.S.R.Raja,			
		AP/MCA, KLN IT			
Guest Lecture	17.11.11	Mrs.Kalpana			
		AP/ Raja Engineering college			
National Level	23.01.12	Mr.Raj Mohan, Director, Enviro care			
Technical Seminar		Mr.MannarMannan, GEMS, Bangalore			

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On Sustainable E-waste Management		Mr.M.S.Nagarajan, TECNICHE, Pune Mr.R.Manivannan,StructuralEngineeer Madurai
National Seminar OnNS-2	29.01.2012	Mr.AlfredRaja Melvin/Mr.V.Vivek AP/CSE, Karunya University, Coimbatore.
Workshop on FOSS	9.08.12, 10.8.12	Mr.Sivabalan&Mr.Baskaran LennuxTechnologies, Chennai
National Level Seminar on Data Mining	29.9.12	Dr.S.Appavu @Balamurugan Research Dean /K.L.N.C.IT
Guest Lecture	10.10.12	Mrs.Senthil Rani, AP/EEE,VCET
Workshop	14.02.13	Mr.Suresh ,CTS,Chennai Mr.Venkatesh ,NIIT,South Zone Mr.KrianSharma, TCS,Chennai
National Level Workshop on Software Testing & Automated Tools	23.02.13	Mr. Murali Jeyaraman, Founder & MD, Mr. ParthasarathyGovindan, Managing Head, Test Pro Systems, Chennai
National Level Paper and Project Presentation	13.09 13	Dr.Sivaram, HOD/IT,TCE
Seminar On"How to do Projects on Data Science"	4.10.2013	Mr.M.ShanmugamSundaram AP/CSE,VCET,Chennai
Workshop on FOSS	9.10.13	IIT Mumbai

## 33. Teaching methods adopted to improve student learningthe following for the mode of delivery of courses.

**Mode of Delivery:** Lecture with Explanation, Videos, Animations, Web information, Memorization, Readings, Lecture with Demonstration - Software demo, Hardware demo, Model demo, Discussion with students, Demonstrate with laws& theories, Analysis with real world problems, Case Study analysis, Case Studies – Computer software simulation with GUI, Seminar, Reviews

## 34. Participation in Institutional Social Responsibility (ISR) and Extension activities

The College has taken initiatives to make the programme offered socially and economically pertinent. Social initiatives are encouraged by the college through NSS Cell, ECO Club and Professional Student Chapters CSI and ISTE.

## 35. SWOC analysis of the department and Future plans Strength

• Diversified Pool of Faculty Members for teaching and learning and research in computer education and research.

- Modern Infrastructure to facilitate teaching and research at par with international standards.
- Outcome Based Education Methodologies for the better assessment of quality of education and research.
- Consistent performance in outcome attainment in terms of academic results, placements and higher studies.

#### Weakness

- Lack of cooperation from the parents of students for discipline and academic related issues.
- Limited scope for consultancy in Computer Science and Engineering at the location of Institution.

#### **Opportunity**

- Young and energetic pool of students with talents for innovative project development.
- Good scope of entrepreneur development at the location of the Institution.
- Different fields for employment apart from IT.

#### Challenges

- Promoting slow learners to minimum requirement for programme.
- Achieving target in all aspects in spite of all complexities rises from all the stake holders.
- Retaining and improving the current performance against unpredictable global economic crisis.
- Improve the Research and Development, Consultancy and Extension activities.
- Bringing specialized value added courses along with regular academic by the University.
- Improving the overall quality of teaching and learning, research, consultancy and extension to the next level.

#### **Future Plan:**

- Strengthening of Research & Development
- More University Rank Holders
- Innovative Students Projects

#### **EVALUATIVE REPORT**

## DEPARTMENTOF ELECTRONICS AND COMMUNICAITON ENGINEERING

### 1. Name of the department: Electronics and Communication Engineering VISION

To emerge as a vibrant centre of repute, moulding students to excel in Electronics and Communication Engineering with ethical responsibility.

#### **MISSION**

To excel in producing competent Electronics and Communication Engineering professionals by

- ➤ Imparting strong theoretical background in the fundamental concepts.
- ➤ Providing self directed learning opportunities to meet a variety of career choices.
- > Training students to realize ethical and environmental responsibilities for the betterment of mankind.
- Entailing the students in Research and Development activities.
- 2. Year of Establishment : 2007-2008
- 3. Names of Programs / Courses offered (UG, PG, Ph.D.)
  - UG -: B. E (ECE):2007-08; PG -M. E (Communication Systems):2011-13; Ph.D: Research Centre of Anna University, Chennai: 2014-15
- 4. Names of Interdisciplinary courses and the departments/units involved: -
- 5. Annual/semester/choice based credit system (programme wise): Semester

6. Participation of the department in the courses offered by other departments

S.No.	Subject Name	Semester	Department
1.	Linear Integrated Circuits Laboratory	IV	CSE
2.	Microprocessor & Microcontroller Laboratory	IV	EEE, CSE, IT
3.	Communication Laboratory	V	IT
4.	Digital Signal Processing	V	CSE,IT
5.	Analog and Digital Communication	III	CSE

- 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

	Sanctioned	Filled
Professor	02	03
Associate .Professor	04	02
Assistant Professor	16	18

#### 10. Faculty profile with name, qualification, designation, specialization:

S.N	Name	Qualification	Designation	Specialization	No. o	of	No.ofP
0					Years	of	h.D
					Experi	ienc	student
					e		S
							guided
							for the
							last 4
							years
					Y	M	

1.	Dr. N. Suresh ME,Ph.D Principal & EMI/EMC Prof		27	6	6		
2.	Dr. S. Vasuki	ME,Ph.D	Prof/Head	Digital Image Processing	27	6	10
3.	Dr. B. Sridevi	ME,Ph.D	Professor	Wireless	13	8	4
4.	Dr. P. SuveethaDhanas elvam	ME,Ph.D	Assoc Prof	Analog VLSI	10	8	
5.	Dr. A. BabuKaruppiah	ME,Ph.D	Assoc Prof	Wireless Sensor Networks	11	8	
6.	Mrs. P.	ME,(Ph.D)	Asst Prof–I	EMI/EMC	13	5	
7.	Mr. G. VeeraSenthil	ME,(Ph.D)	Asst Prof– I	Digital Image	12	3	
8.	Mr. P. Karthikeyan	ME,(Ph.D)	Asst Prof–	Digital Image	11	4	
9.	Mrs. S. Gandhimathi	ME,(Ph.D)	Asst Prof–	Digital Image	12	-	
	Mrs. S. KanagaMalliga	ME,(Ph.D)	Asst Prof–	Digital Image	5	7	
11.	Mr.OmprakashP annir	M. E	Asst Prof– I	Wireless Networks	6	10	
12.	Mr.A.Suban	M. E	Asst Prof–	Digital Signal Processing	3	6	
13.	Mr.P.Anand	M. E	Asst Prof–	Digital Image Processing	3	7	
14.	Mrs.E.Komagal	M. E	Asst Prof–	Digital Image Processing	5	7	
15.	Mr.G.Pradeep	M. E	Asst Prof-	Networks	5	7	
16.	Mrs.S.Geetha	M. E	Asst Prof–	Networks	7	2	
17.	Ms. V.G Janani	M. E	Asst Prof–	Digital Image Processing	2	-	
18.	Mr. R. Arasakumar	M. E	Asst Prof– I	Wireless Communicati	5	6	
19.	Mr. M. Sakthivel	M. E	Asst Prof-	VLSI	11	1	
20.	Mr. R. Raja Raja	M. E	Asst Prof-	VLSI	1	6	
21.	Ms.A.Alaimahal	M.E	Asst Prof–	Digital Image Processing	1	6	
22.	Mrs.G.Shirley	M.E	Asst Prof-	Wireless	-	7	
	Ms.J.Praisiline Karunya	M.E	Asst Prof–	Wireless Networks	-	7	
24.	Mr. S. Sankar	B.E,(MS)	Pro-Term Lecturer	Digital Image Processing	24	10	

11. List of senior visiting faculty: NIL

## 12. Percentage of lectures delivered and practical classes handled by temporary faculty: $\hbox{NIL}$

#### 13. Student - Teacher Ratio (program wise) : 15:1

## 14. Number of academic support staff (technical) and administrative staff; sanctioned and filled

	Sanctioned	Filled
Academic Support Staff (Technical)	6	8

15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil / PG. :

S.No	Name	Highest	Prior
		Qualification	qualification
1.	Dr. N. Suresh Kumar	Ph. D.	M.E.
2.	Dr. S. Vasuki	Ph. D.	M.E.
3.	Dr. B. Sridevi	Ph. D.	M.E.
4.	Dr. P. SuveethaDhanaselvam	Ph. D.	M.E.
5.	Dr. A. BabuKaruppiah	Ph. D.	M.E.

## 16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received

S.No	Name of the Investigators	Funding Agency
1	Dr.N.Suresh Kumar	DST, New Delhi
2	Dr.G.Velmathi, Dr.S.Vasuki, Mr.P.Karthikeyan	DST, New Delhi
3	Dr.S.Vasuki, Mr.S.SankarKuamr	AICTE,New Delhi
4	Dr.S.Vasuki, Mr.G.VeeraSenthil Kumar	DRDO
	Mr.P.Karthikeyan	
5	Dr.S.Vasuki, Mr.A.BabuKaruppiah	DRDO

## 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 of ECE is a recognized research centre of Anna University, Chennai.

#### 19. Publications:

- a) Publication per faculty: 12 (259/21)
- b) Number of papers published in peer reviewed journals(national / international) by faculty and students

S. No	Name of faculty	Mono graph s	Chapt er in books	Book s Edite d	Books with ISBN/I SSN no	Citati on Index	SNIP inde x (Avg )	SJR (Avg)	Publi catio n With impa ct factor	Public ation With h- index
1.	Dr.N.Suresh Kumar	-	-	19	19	-	.326	.4	7	9
2	Dr.S.Vasuki	-	-	-	-	18	-	.537	14	2
3	Dr.G.Velmathi					30	0.88	0.3	8	8
4	Dr.B.Sridevi					18	1.02	.364	5	5
5.	Dr.P.Suveetha Dhanaselvam	-	-	-	-	5	.592	.261	4	2
6.	Dr.A.Babu Karuppiah	-	-	-	-	-	.093	.318	3	4
7.	Mrs.P. Rajeswari	-	-	-	-	-	-	.537	3	-
8.	Mr.G.Veera Senthil Kumar					1	-	.537	2	-

9	Mr.P.Karthike								1	
	yan	-	-	-	-	_	_	_	1	_
10	Mrs.S.Gandhi					_	_	_	1	_
	mathi @Usha								1	
11	Mrs.S.Kanaga								1	
	malliga					_	_	_	1	_

#### 20. Areas of consultancy and income generated :

- **21. Faculty as members in**a)National committees b) International Committees
  - c) EditorialBoards : -
- **22. Student projects:** a)Percentage of students who have done in-house projects including interdepartmental/programme: 100
- 23. Awards / Recognitions received by faculty and students
  - ➤ IEEE RIO Young Humanitarian Challenger 2014 contest Award received by Mr.A.Suban From Asia Specific Countries
  - Received ISSS (Institute of Smart Structures and Systems) Award for the year 2014 by Mr.A.Suban From IISC Bangalore on 10-07-2014
  - ➤ Dr. N. Suresh Kumar received the Eminent Engineer Award from the Institution of Engineers (India), Madurai Local Centre, Madurai on September 15, 2012.
  - ➤ Best Paper Presentation award received by Dr. B.Sridevi in International Conference SEISCON'12 conducted by M.G.R university, Chennai

#### 24. List of eminent academicians and scientists / visitors to the Department

S.No	Year	Name	Designation /Organization		
1.	2011	Mr.I.Eappan	Airport Authority, Madurai		
2.	2011	Mr.G.Sathish Kumar   Scientist, ISRO, Shriharikota Range, Nel			
3.	2011	Mr.P.ShireenKumar	IBM India Pvt. Ltd., Hyderabad		
4.	2011	Mr. S. Deepak Ram Prasad	Manager-Project, Thiagarajar Telecom Solutions Ltd		
5.	2011	Er. B. Aravindhan	Engineer, Nokia Siemens Networks, Coimbatore		
6.	2011	Dr. T. Srinivas	Associate Professor, ECE, Indian Institute of Science		
7.	2011	Dr. D. Sriram Kumar	Associate Professor, National Institute of Technology, Tiruchirappali-		
8.	2011	Dr. Rajesh Devadas	Lead- SOA, Hewlett Packard Enterprise, Custom Applications Practice, Bangalore		
9.	2012	Dr. M. M. Nayak	Ex. ISRO Director, CeNSe, IISC Bangalore		
10.	2012	Mr. Thejas	Research Scholar, Center for Nano Science and Engineering, IISC Bangalore		
11.	2012	Mr. S. Chandrasekar	PLC Trainer, JTECH, Madurai.		
12.	2012	Shri. Ansul Mishra	District Collector, Madurai		
13.	2013	Dr. K. Kulothungan	Professor, College of Engineering, Guindy. Anna University, Chennai.		
14.	2013	Er. M. Rajeshwaran	Director, Real Time Technosoft, Chennai		
15.	2013	Dr. B. Jeyaraman	Rtd Chief Engineer, TNEB, Chennai		
16.	2013	Mr.Rajeswaran	Technical Manager, Real Time Technosoft, Chennai		
17.	2013	Mr. Amarnath	CEO, Embuzz Technologies, Madurai		
18.	2013	Mr. Sharon David	INTEL, U.S.A		
19.	2013	Mr. Raja Duraisamy	Director, Director of Mobile Centre of Excellence, Bangalore		
20.	2014	Mr. C. Dinesh Kumar	CEO, Avian Aerospace		

21.	2014	Prof. M. Krishnaswamy	Former Programmer Director of IRS satellites, Indian Space Research Organization (ISRO), Bangalore
22.	2014	Er. C. Jeyaganesan	Senior Manager, Cisco Systems India Private Limited, Bangalore
23.	2014	Dr. Al-Sakib Khan Pathan	Professor, International Islamic University Malaysia
24.	2014	Dr.K. Ramachandra	CEO, National Program on MICAV- NDRF Consortium. The Institution of Engineers ( India)
25.	2014	Dr.AnitaAggarwal	Scientist- "D",DST,New Delhi
26.	2014	Mrs. SellammalShekhar	Additional Director, Directorate of ER & IPR, DRDO, New Delhi

25. Seminars/ Conferences/Workshops organized & the source of funding

S.No	Seminars/conferences/workshops organized	Funding Agencies
1.	National seminar on Recent trends in communication engineering RETRIC'10(27.08.10)	DRDO
2.	National seminar on Recent trends in communication engineering RETRIC'11(27.08.11)	DRDO
3.	National seminar on Recent trends in communication engineering RETRIC'12(25.08.12)	DRDO
4.	Research Issues in Wireless Networks(18.03.11&19.03.11)	Anna university
5.	Pattern Recognition,Image analysis &applications	Anna university

#### Funded by management

S.No	Name of the Event	Date
1.	National Students Technical Symposium on Recent	23-09-2011
	Advancements in Communication Engineering-RACE'11	
2.	National Level Workshop on Wireless Network	17&18-02-2012
	Simulation	
3.	One Day Faculty Development Program On High	27-07-2012
	Frequency Structure Simulator(HFSS)	
4.	Three Day Workshop on Labview	30-08-2012 to
		01-09-2012
5.	FEEL'13(FDP)	01-03-2013
6.	One Day Workshop on EM Simulation Software ADS for	08-03-2013
	PG Students	
7.	Workshop on Signal & Image Processing using Xilinx	01-08-2013
	System Generator	
8.	National SeminarOnRETRIC'13	23-08-2013
9.	International Conference on ICIECC'14	10&11-04-2014

#### 26. Student profile program/course wise:

Name of the course/ProgrammeB.E-ECE	Applications received	Selected	Enrolled	Pass percentage
2007-2008	60	60	59	90.7
2008-2009	60	60	60	92.9
2009-2010	73	73	71	96.5
2010-2011	90	89	88	97.05
2011-2012	90	90	90	-
2012-2013	85	84	82	-
2013-2014	111	111	109	-

315

2014-2015	112	112	107	

Name of the	Applications	Selected	Enrolled	Pass
course/Programme M.E(C.S)	received			percentage
2011-2012	18	18	18	100
2012-2013	20	18+2	18+2	100
2013-2014	18	18	18	94.44
2014-2015	15	15	15	-

#### 27. Diversity of Students:

Name of the Course	% ofstudents from thesame state	% ofstudents from otherstates	% ofstudents Fromabroad
U.G	100		
P.G	100		

## 28. How many students have cleared national and state competitive examinations NET, SLET, GATE, Civil services, Defense services, etc.?

S No	Year	No of students appeared	No of students qualified
1	2010-14	7	1
2	2009-13	10	1
3	2008-12	9	2
4	2007-11	6	3

#### 29. Student progression

Student	Against % enrolled				
Progression	2010-2014	2009-2013	2008-2012	2007-2011	
UG to PG	9.80%	18.39%	16.90%	27.69%	
Employed	49.01%	67.81%	70.42%	53.84%	

#### **30.** Details of Infrastructural facilities

#### 1.Library:

- Pitch Area:253 sq.ft
- Available No.of book/Titles:200

#### 2.Internet Facilities for staffs and Students:

S.No	Name of the Laboratory	No. of Computers	Internet connectivity
1	Microprocessor & Microcontroller Laboratory	21	LAN &Wi-Fi
2	Signal & Image Processing Lab	30	LAN &Wi-Fi
3	Networks & Simulation Lab	22	LAN
4	VLSI Lab	24	LAN
5	RF Lab	10	LAN
6	Optical & Microwave lab	5	LAN
7	Electronic Circuits Lab, Electronic Devices Lab Integrated Circuits Lab, Communication Systems Lab and Staff Room		Wi-Fi

#### 3. Class rooms with ICT facility:

- LCD projector and ICT facility are available in S09.
- Seminar hall II is equipped with a multimedia projector.
- To present the visual content to the students, 3 LCD projectors are made available in the department

#### 4.Laboratories:

S. No.	Name of the Lab	Size of the laboratory sq. m.
1	Electron Devices Laboratory	230
2	Electronic Circuits Laboratory	230
3	Integrated Circuits Laboratory	221
4	Microprocessor & Microcontroller Laboratory	230
5	Signal and Image Processing Laboratory	230
6	Optical & Microwave Laboratory	135
7	RF Laboratory	74.25
8	Network & Simulation Laboratory	140
9	VLSI laboratory	152
10	Communication Laboratory	201

## 31. Number of students receiving financial assistance from college, university, Government or other agencies

S.No.	Year		Government			
5.110.		BC	MBC	DNC	SC (Scholarship/Tuition fees)	
1	2010-11	37	02	05	17	
2	2011-12	30	05	03	17	
3	2012-13	58	09	06	18	
4	2013-14	71	08	10	18	
5	2014-15	62	11	9	27	

## ${\bf 32. \ Details \ on \ student \ enrichment \ programs \ (special \ lectures \ / \ workshops \ / Seminar) with \ external \ experts}$

S.No	Name of the Event	Date	Details of Resource Person
1.	Three Day Workshop on Labview	30-08-12	Er.R.M.Rajeswaran, Real Time Technosoft Chennai
2.	RACE'12	07-09-12	Shri.Ansul Mishra I.A.S, District Collector Madurai Shri.S.Sivasubramanian, Senior Scientist[R.td] ISRO
3.	Guest Lecture on PLC and Embedded Systems	20-09-12	Mr.Chandrasekar, PLC Trainer,JTECH,Madurai
4.	Guest Lecture on Research Issues in Recent Communication Technologies	04-02-13	Mr.Baskaran&Mr.Suresh, Pantech solution , Madurai
5.	One Day Workshop on EM Simulation Software ADS for PG Students	08-03-13	Mr.Jayananthan, ElmackEnggServices,Chennai
6.	Guest Lecture on Static VAR Compensation and FACT devices	20-07-13	<b>Dr.B.Jeyaraman</b> , Rtd Chief Enginner, TNEB
7.	Guest Lecture on Embedded Systems	20-07-13	<b>Er.M.Rajeshwaran,</b> Director Real Time Technosoft
8.	Workshop on Signal & Image Processing using Xilinx System Generator	01-08-13	Mr.M.S.Damdara, Product Manager, CoreEL Technologies,
9.	Guest Lecture on Real Time Implementation on Systems in	04-10-13	Mr.Amarnath CEO,Embuzz Technologies

	Embedded Technology		
10	Guest Lecture on Study of VLSI Design and INTEL	06-01-14	Mr.Sharon David Design
10.	VLSI Design and INTEL		Enginner INTEL U.S.A
	District Level Project Contest	05-08-	Mr.Senthil Kumar,
11.	on Intellectual Technovation	2014	Managing Director,Live Wire
	Contest-Phase II	2014	Technologies Madurai

## 33. Teaching methods adopted to improve student learningthe following for the mode of delivery of courses.

- Lectures with Chalk, Overhead projections, Power Point Presentations
- NPTEL Video Lectures
- Tutorials, Assignments, Quizetc
- Group discussions

## ${\bf 34.\ Participation\ in\ Institutional\ Social\ Responsibility\ (ISR)\ and\ Extension\ activities}$

Number of students enrolled in ECO Club – 85

Number of students served in NSS - 71

#### 27. SWOC analysis of the department and Future plans

Strength	Weakness	Opportunities	Challenges
AICTE norms.  • Strengthened with 6 Ph.D holders in diversified core areas	<ul> <li>Less focus on entrepreneurship development</li> <li>Not much autonomy in framing the syllabus</li> <li>Lack of Interdisciplinary Projects</li> <li>Lack of Consultancy</li> </ul>	<ul> <li>Students placements in core areas</li> <li>Students' participation in club activities, intercollegiate competitions.</li> <li>Preparing students for GATE, BEC and aptitude Exam Students' participation in club activities, intercollegiate competitions.</li> </ul>	<ul> <li>To file for patents.</li> <li>Post Doctoral Fellowship</li> <li>Balancing administrative and academic load</li> <li>Training the rural background students and equipping them with soft skills and communication skills.</li> <li>Placements in core areas</li> </ul>

#### **Future Plan:**

All the challenges that are in existence would be implemented in near future.

#### EVALUATIVE REPORT

#### DEPARTMENT OF ELERCTRICAL AND ELECTRONICS ENGINEERING

1. Name of the department: Electrical and Electronics Engineering

#### Vision:

To produce quality Electrical Engineers for industry and good citizens for society throughexcellence in technical education and research.

#### Mission:

Our aspirants are

- To empower graduates with sophisticated knowledge and technical skills.
- To explore, create and develop innovations in Electrical Engineering and Technology.
- To provide beneficial service to the rural, state, national and international communities.
- 2. Year of Establishment : 2007-2008
- 3. Names of Programmes / Courses offered (UG, PG,Ph.D.) :
  - UG –B.E (EEE): 2007-08; PG –M.E(Power System Engineering):2012-13; Ph.D: 2014-15
- 4. Names of Interdisciplinary courses and the departments/units involved: Nil
- 5. Annual/ semester/choice based credit system (programme wise): Not Applicable

6. Participation of the department in the courses offered by other departments

S.No.	Subject Name	Department	Semester
1	Electrical Drives and Control, Electrical	MECH	III
	Engineering Lab		
2	Electrical Engineering and Control System	ECE	IV
	Lab		
3	Digital Signal Processing	CSE	VII

- 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	Filled
Professor	03	03
Associate .Professor	01	01
Asst. Professor	19	19

10. Faculty profile with name, qualification, designation, specialization:

Name	Qualificatio n	Designatio n	Specialization	No Yea Expe	o. of rs of erienc e	No.of Ph.D. student s guided for the last 4
Dr. A. Chunmugalatha		Drof /	Douge Cystom	21	2	years
Dr. A. Shunmugalatha	M.E., Ph.D.	Prof /	Power System	∠1	3	8
	,	Head				

Dr. N. Karpagam	M.E., Ph.D.	Professor	Power System	18	3	2
Dr. R. NarmathaBanu	M.E., Ph.D.	Professor	Power System	13	4	2
Dr. S. Dhanalakshmi	M.E., Ph.D.	Assoc Prof	Power System	13	3	-
Mr. R. J. Venkatesh	M.E.,	Asst Prof-	Applied	14	5	-
	(Ph.D)	I	Electronics			
Mrs. D. FathemaFarzana	M.E.,	Asst Prof-	Power System	14	6	-
	(Ph.D)	I				
Mr. T. Chandrasekar	M.E.,	Asst Prof-	Power System	13	5	-
	(Ph.D)	II				
Mrs. S. Senthilrani	M.E.,	Asst Prof-	VLSI DESIGN	13	3	-
	(Ph.D)	II				
Mrs. A. Radhika	M.E.,	Asst Prof-	Power	6	10	-
	(Ph.D)	II	Electronics			
Mr. P. Duraipandy	M.E.,	Asst Prof-	Power System	8	10	-
	(Ph.D)	II				
Mr. N. Selvam	M.E.	Ass Prof-	Power	8	3	-
		III	Electronics			
Ms. T. DeepikaVinothini	M.E.,	Ass Prof-	Power	3	9	-
	(Ph.D)	III	Electronics			
Mrs. B. Kiruthiga	MBA.,M.E.	Ass Prof-	Power	6	9	-
		III	Electronics			
Ms. J. Rajeswari	M.E.	Ass Prof–	Communicatio	3	2	-
		III	n Systems			
Mr.K.Padmanaban	M.E.	Ass Prof-	Power	1	9	-
N. G.V.G.	-	III	Electronics			
Mr.G.V.Chidamabarathan	M.E.	Ass Prof-	Power	4	3	-
u N D D L L L D :	-	III	Electronics	2		
Ms.R.B.JayanthiRajee	M.E.	Ass Prof–	Communicatio	2	6	-
M D C 41		III	n Systems	1		
Ms.R.Gayathri	M.E.	Ass Prof–	Power System	1		-
M. C. W. H. M. L. I		III	•	1		
Mr.G.KadharMohideen	M.E.	Ass Prof–	Power System	1		-
Mr. A OneDuctoral		III	Danier Careta	1		
Mr. A.OmPrakash	M.E.	Ass Prof– III	Power System	1		_
Ms. M.Devaki	B.E.,	Teach. Ass	Electrical	3	8	-
	(M.E.,)					
Mr.V.Chandrasekaran	B.E (M.E.,)	Teach. Ass	Electrical	1	4	-
Mr. P. Sivakumar	B.E., M.E.	Teach. Ass	Electrical	1		-

#### 11. List of senior visiting faculty: Nil

12. Percentage of lectures delivered and practical classes handledby temporary faculty:Nil

13. Student - Teacher Ratio (programme wise) : 15:1

### 14. Number of academic support staff (technical) and administrative staff; sanctioned and filled

	Sanctioned	Filled
Academic Support Staff (Technical)	05	05

#### 15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil / PG.:

	•	
Name of faculty	Highest	Prior
	qualification	qualification
Dr. A. Shunmugalatha	Ph.D.,	M.E.,
Dr. N. Karpagam	Ph.D.,	M.E.,

Dr. R. NarmathaBanu	Ph.D.,	M.E.,
Dr. S. Dhanalakshmi	Ph.D.,	M.E.,

### 16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received:

S.No.	Number of faculty with ongoing projects	Funding Agencies	Amount received in Lakhs
1.	Dr.A.Shunmugalatha, Mr. J. Karthikeyan	DRDO	14.98
2.	Dr.N.Karpagam, Dr.S.Dhanalakshmi	AICTE	8.75

- 17. Departmental projects funded by DST FIST;UGC,DBT,ICSSR, etc. and totalgrants received:-- Not Applicable
- **18. Research Centre / facility recognized by the University:** Anna University Chennai, 2014-2015
- 19. Publications:
- a) Publication per faculty: 12 (259/21)

S. N	Name of faculty	No.of Publicati on	Chapt er in books	Books with ISBN/IS SN no	Citati on Index	SNI P inde x	SJ R	No. of Publicati on With impact factor	No. of Publicati on With- index
1	Dr. A. Shunmugalatha / Prof & Head	30	01	1 (978- 93- 80659- 70-1)	38	-	-	8	3
2	Dr. N. Karpagam / Prof.	40	02	-	42	2	2	1	3
3	Dr. R. NarmathaBanu /Prof.	30	1	-	47	-		1	5
4	Dr.S.Dhanalaks hmi / Asso. Prof.	30	2	-	61	3	3	2	3
5	Mr. R. J. Venkatesh / API	9	-	-	-	-	-	-	
6	Mrs. D. FathemaFarzan a / AP I	13	-	-	-	-	-	-	1
7	Ms. S. Senthilrani / APII	14	-	-	-	-	-	4	-
8	Mr. T. Chandrasekar /APII	5	-	-	-	-	-	-	
9	Ms. A. Radhika / APII	8	-	-	-	-	-	-	1
10	Mr. P. Duraipandy / APII	28	2	-	-	2	2	1	2
11	Mr.N.Selvam	5	-	-	-	-	-	-	-
12	Ms. T. DeepikaVinothi ni/ APIII	7	-	-	-	-	-	-	-

13	Ms. B. Kiruthiga / AP III	13	-	-	-	-	-	2	-
14	Ms. J. Rajeswari/ APIII	7	-	-	-	-	-	1	-
15	Mr. G. V. Chidambaratha nu / APIII	3	-	-	-	-	-	-	-
16	Mr. K. Padmanaban / APIII	3	-	-	-	-	-	-	-
17	Ms. R. B. JayanthiRajee / AP III	6	-	-	-	-	-	2	-
18	Mr. G. KadharMohidee n /APIII	2	-	-	-	-	-	-	-
19	Mr. A. OmPrakash /APIII	2	-	-	-	-	1	1	-
20	Ms. R. Gayathri /APIII	3	-	-	-	-	-	-	-
21	Ms. M. Devaki / TA	1	-	-	-	-	-	-	-

20. Areas of consultancy and income generated:

**21. Faculty as members in**a) National committees b) International Committees c) EditorialBoards : - Nil

Nil

**22. Student projects:** a)Percentage of students who have done in-house projects including interdepartmental/programme – 100%

23. Awards / Recognitions received by faculty and students

S.No.	Awards	Title	Faculty / Students Name
1.	ISTE &	Young Engineer	Dr.J.Karthikeyan
	IE(I)	Award	
2.	Best	Enhanced Portable	Dr.A.Shunmugalatha,Ms.S.Evangeline
	Paper	Power system	Selvarani, Ms.S.Bakya,
	Award		Ms.R.Meena
3.	Best	Online voltage	Mr.P.Duraipandy, Ms. S.
	Paper	stability assessment	KulandaiVelammal@ Swathi, Ms. R.
	Award	using least squares	M. Ramagiri
		support vector	
		machine with reduced	
		input features.	
4.	Best	Effective Battery	Mr. G. V.Chidhambarathanu,
	Project	charging by solar	Ms.S.Evangeline Selvarani,
	Award	energy using C-	Ms.S.Bakya, Ms.S.P.Gayathri,
		Programming and	Ms.T.Alamelu
		Microcontroller	

24. List of eminent academicians and scientists / visitors to the Department

Year	Name	Designation/Organization	Purpose of visit
2014	Er. S. Senthil Nathan	Protection Engineer, United Engineering	EEE Association
		Projects Co LLC, Muscat, Oman.	inauguration
2014	Er. M. Chandrakumar	Industry Technical Engineer, M/s	FDP inauguration

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		Trident Tech Labs Private Limited,	
2013	Dr. AkhtarKalam	Bangalore. Prof., Victoria University, Australia.	Chief guest for int conference, ICPES
2013	Dr. M. Ravindran	Chairman, Naval Research Board, New Delhi.	Chief guest for int conference, ICPES
2013	Shri. R.S.Sundar,	Station Director, KKNPP.	Chief guest for int conference, ICPES
2013	Er. I. Razik Raja	Mitusubhishi Heavy Industries Ltd., Japan.	EEE Association inauguration
2013	Dr. S. Gopinath	Senior Architect, Robert Bosch Engg. Solutions Ltd., Bangalore.	Guest lecture on control system
2012	Er. J. BrittoSahayam	Asst.Vice President, B.G.R Energy Ltd., Chennai	Chief guest for Energy awareness camp
2012	Shri. S.E.S. Syed Ahamed	Deputy General Manager, TN Energy Development Agency, Madurai Region	Chief guest for FDP
2012	Dr. V. Saravanan	Associate Professor, EEE Dept. TCE, Madurai.	Guest lecture on energy conservation
2012	Er. R. Arunan.	Project Engineer, Kongsberg Maritime Pvt. Ltd., Singapore.	Chief guest for technical symposium
2012	Er. N. Krishna Kumar	Technical Manager, Kongsberg Maritime Pvt. Ltd., Singapore.	Chief guest for technical symposium
2012	Er. Velayutham	(Ex-Member), Maharastra Electricity Regulatory Board.	Chief guest for EEE association for inauguration
2012	Mr. RamanathanSampath	Assistant Professor, Clark Atlanta University, Atlanta, USA	Seminar on biological monitoring coal mine streams
2012	Er. S. SelvaMuthu Kumar	GM, EMMESS Control Pvt Ltd., Chennai.	Chief guest for FDP
2012	Mr. C. Kannan	Senior Manager Trainee, TNEB, Madurai.	Resource person for FDP
2012	Dr. C.K.Babulal,	Prof/EEE, TCE, Madurai.	Resource person for FDP
2012	Dr. R.Gnanadass	Prof/EEE, Pondicherry Engg., College, Pondicherry	Resource person for FDP
2012	Dr. P.Sivakumar	Director, DRDO Avadi, Chennai.	Chief guest for technical symposium
2012	Dr. U.Solomon	Scientist, CVRDE, DRDO, Chennai.	Guest lecture research opportunities in DRDO
2011	Mr. V.Angusamy	Asst. Manager, Wind Care India Ltd., Coimbatore.	Chief guest for energy awareness camp
2011	Er. S. PandianArivudainambi	Deputy Manager, V Belts, Fenner India Ltd., Madurai	Chief guest for energy awareness camp
2011	Dr. S.Baskar	Prof, EEE/TCE, Madurai.	Chief guest for FDP
2011	Mr. M. Balasubramanian	Prof., EEE, A.C.C.E.T, Karaikudi	Resource person for FDP
2011	Mr.P.G.S.Dinesh	DGM, Fenner India Ltd., Madurai.	Chief guest for EEE

2011	Er. S.Raja Shree	Senior Managers/ Training Division,	Chief guest for FDP
	Er. S.Raja Since	TNEB, Madurai.	
2011	Er. A.Nachadalingam	Chief Engineer, TNEB, Madurai.	Chief guest for
	Er. A.Nachadanngam	Chief Engineer, TNED, Waddrai.	technical symposium
2011	Shri.S.Madivanan	TNEB, Madurai	Role of IT in DRDO
2010			Chief guest for EEE
	Mrs. Sophia Immanuel	Scientist 'F', DRDO, Chennai.	association for
			inauguration

25. Seminars/ Conferences/Workshops organized & the source of funding

SI.No	Seminars/conferences/workshops organized	Funding Agencies
1.	One day FDP on Advanced Technologies on Distributed Generation & Microgrids, 2012	DRDO
2.	Two days FDP on Research Issues in Electrical Engineering. , 2011.	AUT, Madurai
3.	One day National Seminar on Special Electrical Machines, 2011.	DRDO
4.	One day Workshop on Application tools for Engineering Science, 2010.	DRDO

#### 26. Student profile programme /course wise:

Name of the	Applications	Selected	Enrolled	Pass
course/Programme	received			percentage
B.E-EEE				
2007-2008	69	66	66	93.65%
2008-2009	69	69	69	98.50%
2009-2010	20	85	85	96.42%
2010-2011	100	96	96	96.87%
2011-2012	106	106	106	-
2012-2013	108	108	108	-
2013-2014	118	118	118	-
2014-2015	108	101	115	-

#### **27. Diversity of Students:**

Name of the	% of students	% of students	% of
Course	from the	from other States	students
	same state		from
			abroad
B.E (EEE)	100	-	-

# 28. How many students have cleared national and state competitive examinations such s NET, SLET, GATE, Civil services, Defense services, etc.?

Batch	2007-11	2008-12	2009-13	2010-14
No. of	TANCET-4 Nos;	TANCET -5 Nos;	TANCET -8	TANCET -8 Nos;
Students	GATE-5 Nos;	GATE-1 Nos;	Nos; GATE -7	GATE -4 Nos;
	TOEFEL -4 Nos	TOEFEL -1 Nos	Nos;	TOEFEL-3
			CAT-2 Nos	Nos;IELTS-4 Nos

#### 29. Student progression

Student progression	2007-2011	2008-2012	2009-2013	2010-2014
UG to PG	11/63	10/67	20/84	18/96
PG to Ph.D.	-	-	-	-
Ph.D. to Post-Doctoral	-	-	-	-
Employed				
<ul> <li>Campus selection</li> </ul>	26/63	29/67	24/84	33/96
<ul> <li>Other than campus</li> </ul>	15/63	23/67	17/84	07/96
recruitment				
Entrepreneurship/Self-	01/63	-	02/84	02/96
employment				

#### 30. Details of Infrastructural facilities

#### a) Library

Area of	Seating	Working	Total No of Text	Total No of
Library	capacity	hours	Books	Specimen Copy

Name of the		% of students		% of students		% of	
Course		from tl	he	from other States		students	
		same state				from	
						abroad	
B.E (EEE)		100		-		-	
270 Sq. Feet	20		09.00	200	1	50	
(67 Sq m)			A.M to				
			05.30				
			P.M				

#### b)Internet facilities for Staff & Students

S.No	Description of the	Computing facilities Available			
5.110	Room/Laboratory	Server	Computers	Internet	Wi-fi
1.	Power System Simulation	01	44	Yes	-
	Laboratory				

S.No	Description of the	Con	nputing facil	ities Avai	lable
2.	Electrical Machines Laboratory	-	02	Yes	-
3.	Electrical Circuits Laboratory	-	01	Yes	-
4.	Research and Development	-	01	Yes	-
	Laboratory				
5.	Seminar Hall	-	01	Yes	-
6.	Faculty Room	-	05	Yes	Yes

#### c) Class rooms with ICT facility:

- Wi Fi facility is available in Room No. F03
- LCD projector and ICT facility are available in F03.
- Portable LCD projector is used in all class rooms.

The following facilities are provided by the institution to kindle the self-learning skills of the students.

#### d) Laboratories: -

Name of the Laboratory	Capacity (in Sq.m.)
Electric Circuits & Engineering Practice	270
Laboratory	270
Electrical Machines Laboratory	270
Power System Simulation Laboratory	270
Control & Instrumentation laboratory	270
Power Electronics Laboratory	270

### 31. Number of students receiving financial assistance from college, university, Government or other agencies

	Year	Government				
S.No.		ВС	MBC	DNC	SC (Scholarship/ Tuition fees)	
1	2010-11	17	6	8	17	
2	2011-12	41	5	7	20	
3	2012-13	76	10	18	23	
4	2013-14	104	10	30	21	
5	2014-15	65	9	16	28	

# **32.** Details on student enrichment programmes (special lectures / workshops /Seminar) with external experts

/ \	/Semmar) with external experts				
C No	Special	External Experts			
S.No	lectures/workshops/seminar	Designation/Organization			
1.	Importance of GATE (31.03.2014)	Mr. A. Aravind Raj, M.Tech.Student, NIT, Trichy.			
2.	Guest Lecture on Electronic Devices & Circuits (28.09.2013)	Mr. B. Ashokkumar, Professor, EEE, TCE, Madurai.			
3.	Seminar on Role of Electrical Engineer in Industries (01.03.2013)	Dr. S.Gopinath, Senior Architect, Robert Bosch Engg. Solutions Ltd., Bangalore.			
4.	Energy Awareness Camp (21.11.2012)	Er. J. BrittoSahayam, Asst.Vice President, B.G.R Energy Ltd., Chennai			

		Er. R. Arunan, Project Engineer,
		Kongsberg Maritime Pvt. Ltd., Singapore.
5.	Technical Symposium	Er. N. Krishna Kumar, Technical
J.	EWAR'12 (21.09.2012)	Manager, Kongsberg Maritime Pvt. Ltd.,
		Singapore.
	Seminar on Biological	Mr. RamanathanSampath, Assistant
6.	Monitoring& Coalmine	Professor, Clark Atlanta University,
0.	Streams (03.05.2012)	Atlanta, USA
	Awareness Programme on	Shri. R.S.Sundar, Station Director,
	Nuclear Energy Educational	KKNPP.
7.	Meet	Shri.R.Banerjee, Project Director,
	(02.03.2012 & 03.03.2012)	KKNPP.
		Dr. C.K.Babulal, Prof/EEE, TCE,
8.	Guest Lecture for EEE	Madurai.
	Students	Dr. R.Gnanadass, Prof/EEE, Pondicherry
	(18.02.2012)	Engg College, Pondicherry
	G V C FFF	Dr. P.Sivakumar, Director, DRDO Avadi,
	Guest Lecture for EEE Students	Chennai.
9.		Dr. U.Solomon, Scientist, CVRDE,
	(11.02.2012)	DRDO, Chennai.
		Mr. V.Angusamy, Asst. Manager, Wind
	Inauguration of Energy	Care India Ltd., Coimbatore.
10.	Awareness Camp	Er. S. PandianArivudainambi, Deputy
	(22.11.2011)	Manager, V Belts, Fenner India Ltd.,
		Madurai
	National Franchisco Training	Er. S. Vennila, Senior Manager/ Training
11.	National Franchisee Training Programme (03.03.2011 & 05.03.2011)	Division, TNEB, Madurai.
11.		Er. S.Raja Shree, Senior Manager/
	05.05.2011)	Training Division, TNEB, Madurai.
	Technical Symposium,	Er. A.Nachadalingam, Chief Engineer,
12.	EWAR'11	TNEB, Madurai.
	(22.02.2011)	11 (22), Iriudului.
	Technical Symposium	Shri.S.Madivanan, Scientist 'F', DRDO,
13.	BEACON'10	Chennai.
	(01.03.2010)	
	National Symposium on	Mrs.S.Selvalakshmi, SDFM, Southern
14.	Recent Electrical	Railway, Madurai.
	Developments RED'09	

### 33. Teaching methods adopted to improve student learningthe following for the mode of delivery of courses.

**Modes of Delivery:** Lecture with Explanation, Videos, Animations, Web information, Memorization, Readings, Lecture with Demonstration - Software demo, Hardware demo, Model demo, Discussion with students, Demonstrate with laws& theories, Analysis with real world problems, Case Study analysis, Case Studies – Computer software simulation with GUI, Seminar, Reviews.

### 34. Participation in Institutional Social Responsibility (ISR) and Extension activities

In order to create awareness about New &Renewable Sources of Energy, its various systems and devices among the students community, Velammal College of Engineering and Technology through Department of Electrical and Electronics Engineering has set up "Velammal's Renewable Energy Club". As a part of this club activity, Energy Awareness Camp for school and college students are organized since 2008. The motive of this camp is to promulgate the significance of Renewable Energy Sources and its Applications to the students' community.

Extension activity	No. of students participated
NSS	32
ECO club	21

35. SWOC analysis of the department and Future plans

Strength	Weakness	Opportunitie	Challenge
		S	S
Academic excellence	Less	Adopting new	Industry
Diverse area of specialization	opportunities	evaluation	Institution
Well qualified experienced &	foremploymen	system for	interaction.
dedicated faculty members; Good	t core	academic	Low
placement record	companies	performance	caliber
Higher studies in reputed		of students;	students at
Institution / Universities abroad;		Increasing	theentry
Conducting value added courses		contacts with	level
Increasing research output by		outside world.	
way of publications			
Competitiveresearchteams/group			
s of high-quality			
Research based teaching.			

#### **Future Plan:**

- Improving students' performance through teaching& learning process
- Signing MOU with core companies
- Strengthening of Research & Development laboratory and Department Library
- Modernization of Laboratories.

### EVALUATIVE REPORT DEPARTMENT OF INFORMATION TECHNOLOGY

1. Name of the department: **Information Technology** 

#### **VISION**

To become a nationally and internationally recognized centre of excellence in the field of Information Technology through Teaching, Research, Consultancy, and Service.

#### **MISSION**

- ❖ To produce graduates with high quality, state-of-art knowledge, innovation, ethics, and social responsibility.
- ❖ To promote excellence in teaching, research, leadership and strong contribution to the society.
- ❖ To enhance the student's knowledge in the recent technology by conducting continuing education programs, organizing and participating in various technical events.
- ❖ To provide a framework for promoting the industry-institution collaboration and empower the students in multidisciplinary activities
- 2. Year of Establishment: 2007
- 3. Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.): **B.Tech Information Technology & M.E CSE (Specialization in Networks)**
- 4. Names of Interdisciplinary courses and the departments/units involved: Nil
- 5. Annual/ semester/choice based credit system (programme wise): **Semester**
- 6. Participation of the department in the courses offered by other departments:

### **Data structures & Object Oriented Programming to II Year III Semester Students of ECE**

- 7. Courses in collaboration with other universities, industries, foreign institutions, Etc: **Nil**
- 8. Details of courses/programmes discontinued (if any) with reason: Nil
- 9. Number of teaching posts

	Sanctioned	Filled
Professors	2	2
Associate Professors	Nil	Nil
Asst. Professors	12	12

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt./Ph.D. / M. Phil. etc.,)

Name	Qualification	Designation	Specializati on	No. of Years of Experien ce	No. of Ph.D Student s
Dr.S.Rajpandian	M.Tech, Ph.D	Research	Robotics	17	
		Director/			
		Professor			Nil
Dr.R.Perumal Raja	M.E, Ph.D	Professor &	Electrical	7.5	
		Head	and		
			Computer		
			Engineering		
Mr.S.Kamalesh	M.E, (Ph.D)	AP-II	Computer	10.4	
			Science and		

			Engineering	
Dr.A.Sumithra	M.Tech, Ph.D	AP-II	Information	5.5
			Technology	
Mrs.K.Dhanalakshm	M.E, (Ph.D)	AP-III	Computer	9.4
i İ	, , ,		Science and	
			Engineering	
Mrs.M.Seema	B.E, M.E	AP-III	Embedded	8
	,		System	
			Technology	
Mrs.M.Prabha	B.Tech,	AP-III	Information	1.10
	M.Tech		Technology	
Mrs.P.Saraswathi	B.E, M.Tech	AP-III	Computer	2. 10
	,		Science and	
			Engineering	
Mr.V.Rajaramanan	M.Sc, M.E	AP-III	Computer	7
J			Science and	
			Engineering	
Mrs.D.Anandhavalli	B.E, M.E	AP-III	Computer	9.4
			Science and	
			Engineering	
Ms.N.Shanmuga	B.Tech,	AP-III	Information	2.4
Sundari	M.Tech		Technology	
Mr.S.Satheesh	B.Tech, M.E	AP-III	Computer	6.9
Kumar			Science and	
			Engineering	
Mr.P.Suresh Babu	B.Tech, M.E	AP-III	Computer	4
			and	
			Communica	
			tion	
			Engineering	
Ms .M.Swathi	B.Tech, M.E	AP-III		11
			Communica	Months
			tion &	
			Networking	

- 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:4
- 15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil / PG:  $\bf 3$  Ph.D,  $\bf 11$  P.G

#### **List of Ph.D Qualified Faculties**

Name	Highest Qualification	Previous to Highest Qualification
Dr.S.Rajpandian	Ph.D	M.Tech
Dr.R.Perumal Raja	Ph.D	M.E
Dr.A.Sumithra	Ph.D	M.Tech

List of P.G Qualified Faculties

Name	Highest Qualification	Previous to Highest
		Qualification
Mr.S.Kamalesh	M.E	B.E
Mrs.K.Dhanalakshmi	M.E	B.E
Mrs.M.Seema	M.E	B.E
Mrs.M.Prabha	M.Tech	B.Tech
Mrs.P.Saraswathi	M.Tech	B.E
Mr.V.Rajaramanan	M.E	M.Sc
Mrs.D.Anandhavalli	M.E	B.E
Ms.N.Shanmuga	M.Tech	B.Tech
Sundari		
Mr.S.Satheesh	M.E	B.Tech
Kumar		
Mr.P.Suresh Babu	M.E	B.Tech
Ms .M.Swathi	M.E	B.Tech

- 16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received: **One**
- 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:
- \* a) Publication per faculty

S.No	Faculty Name	No of Papers
		published
1.	Dr.S.Rajpandian	13
2.	Dr.R.Perumal Raja	2
3.	Mr.S.Kamalesh	5
4.	Mrs.K.Dhanalakshmi	5
5.	Dr.A.Sumithra	13
6.	Mrs.M.Seema	3
7.	Mrs.M.Prabha	1
8.	Mrs.P.Saraswathi	2
9.	Mrs.D.Anadhavalli	8
10.	Ms.N.Shanmuga sundari	2
11.	Mr.S.Satheesh Kumar	2
12.	Mr.P.Suresh Babu	2
13.	Ms.P.Swathi	1

<sup>\*</sup> Number of papers published in peer reviewed journals (national / international) by faculty and students:

	Faculty Name	No	of	Papers
S.No		publis	shed	

1	Dr.S.Rajpandian	4
2	Dr.R.Perumal Raja	1
3	Mr.S.Kamalesh	1
4	Mrs.K.Dhanalakshmi	1
5	Dr.A.Sumithra	6
7	Mrs.M.Prabha	1
8	Mrs.P.Saraswathi	1
9	Mr.V.Rajaraman	-
10	Mrs.D.Anadhavalli	3
11	Ms.N.Shanmuga sundari	1
12	Mr.S.Satheesh Kumar	2
13	Mr.P.Suresh Babu	1
14	Ms.P.Swathi	-

<sup>\*</sup> 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.) 5

\* Monographs: **Nil**\* Chapter in Books: **Nil**\* Books Edited: **Nil** 

\* Books with ISBN/ISSN numbers with details of publishers: Nil

\* Citation Index: Nil

\* SNIP: Nil \* SJR: Nil

\* Impact factor: **0.35-2** 

\* h-index: Nil

20. Areas of consultancy and income generated:

S.NO	Name of the Faculty	Project Title	Dura tion	Consultancy Agency	Funds Receiv ed
1.	Dr.S.Raj Pandian, Mrs.D.Anandhavalli Ms.K.C.Aarthi	Robot arm / trajectory control	One Year	Velammal Educational Trust	Nil*
	Dr.M.Janaki Meena Ms.N.Shanmuga Sundari	A custom Pharmacy sale software package	One Year	Velammal Educational Trust	Nil*
3.	Dr.R.Perumalraja , Mr.V.Rajaramanan	RFID	One Year	Velammal Educational Trust	Nil*
4.	Mrs.D.Anandhavalli , Mrs.M.Seema	SMS for Schools	One Year	Velammal Educational Trust	Nil*
5.	Dr.S.RajPandian , Ms.P.Saraswathi Ms.M.Prabha	CNC Machine	One Year	Velammal Educational Trust	Nil*

6.	Mrs.A.Sumithra , Mrs.K.Dhanalakshmi	SMS for VCET	Two Years	Velammal Educational Trust	Nil*
7.	Mrs.A.Bazila banu , Mrs.Rajalavanya	Website Creation for Velammal Medical College	Two Years	Velammal Educational Trust	Nil*
8.	Dr.P.Ganesh kumar , Mr.S.Kamalesh Mr.G.Saravanan	Smart Irrigation System for Precision Agriculture using Wireless Sensor Networks	Three Years	Tamil Nadu Agriculture College and Research Institute, Madurai	Rs. 1L
9.	Dr.R.Perumalraja , Mr.V.Rajaramanan	Bid track-Online GPS Vehicle Tracker Mobile App	Two Years	Velammal Medical College and Hospitals and Big A Solutions, Madurai	Nil*

<sup>\*</sup>Free of cost, Projects were carried out for Velammal Educational Trust.

- 21. Faculty as members in
- a) National committees b) International Committees c) Editorial Boards....

#### **Reviewers in Journal**

S. No	Name of the Staff	Name of the Journal	
1.	Dr. S. Raj Pandian	IEEE Transactions of Oceanic Engineering	
2.	Dr. R. Perumalraja	IEEE Transactions on Vehicular Technology	
		The Journal of Engineering	
		EURASIP Journal on Wireless Communications and	
		Networking	
		Computers and Electrical Engineering Journal –	
		Elsevier	

#### 22. Student projects

- a) Percentage of students who have done in-house projects including inter departmental/ programme: 70%
- b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies: 30%
- 23. Awards / Recognitions received by faculty and students:
  - V.Jaganya &.R.Aarthi Batch 2008-2012 The Young Investigator Awards in the International Conference of Computer Science and Information Technology which was held on 21.4.12 at Metro Park Inn,Coimbatore.
  - During the academic year 2014-2015 III year and IV Year team won **SEARCH 2014-APP Start Contest** organized by The Times of India and Velammal Institute of Technology.

- S.Ezhilarasi & E.Sangita won **Student Innovator Award** by ICTACT in the year 2014.
- A.R.Abirami, S.R.Poornima Sri, S.Praveen Karthick won **Women's Empowerment Award** in the year 2014.
- B.Shruthi Priya won **Big Idea Award** and got 15,000 cash prize in the year 2015.
- 24. List of eminent academicians and scientists / visitors to the department:

S. No	Year	Name of the Academician / Scientist	Designatio n	Organization	Purpose of Visit	National/ International
1.	2011	Dr.S.Prabhakara n	Director & Head,	University of Saudi, Saudi Arabia	Inaugurated the IT association	International
2.	2012	Mr.O.G.Kosal Kumar	CEO	Versata Technologies USA	Inaugurated the IT association	International
3.	2013	Mr.W.S.Aruldos s Kanthiah	Outstanding Scientist &Former Director, Heavy	Dept. of Atomic Energy, Govt.of India, Mumbai	Research Visit	National
4.	2013	Dr. B. K. Tyagi	Director	ICMR, Madurai	Seminar on "Recent research trends in Indian Council for Medical Research"	National
5.	2013	Dr.M.Ravindran	Chairman	DRDO, Navel Research Bord, Chennai	Research Visit	National
6.	2014	Dr.Robert Dalling	Instructor in Physics	Louisiana school of math, Science and Arts, Natchitoches, LA,USA	Research Visit	International
7.	2014	Dr.K.Ramachand ra	CEO	National Micro Aerial Vehicles	Research Visit	National
8.	2014	Mr.R.Swaminath an	СТО	Cogzidal, Madurai	"Mini-Project Competition", Chief guest	National
9.	2014	Dr.B.J.Pandian,	Director	TNAU Coimbatore	Guest lecture about "Opportunities for Youth in Precision Agriculture"	National

- 25. Seminars/ Conferences/Workshops organized & the source of funding:
- a) National: 1 b) International: Nil

Source of fund: One National Conference was given by Management and self supported.

26. Student profile programme/course wise:

Name of the Course/programme	Applicatio ns	Selected	Enr	olled	Pass Percentage
(refer question no. 4)	Received		*M	*F	

B.Tech 2008-2012	72	72	37	35	87.5
2009-2013	58	58	21	37	89.6
2010-2014	66	61	24	42	81.8

\*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
B.Tech IT	100	Nil	Nil
M.ECSE(With	100	Nil	Nil
Specialization in N/W			
Engg)			

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc. ?

Academic Year	GATE	IELTS	MAT	CAT
2014 – 2015	2	1	1	-
2013-2014	1	-	-	1

29. Student progression

<b>Student Progression</b>	Against % enrolled
UG to PG	9.68
PG to M.Phil.	-
PG to Ph.D.	-
Ph.D. to Post-Doctoral	-
Employed	44.06
<ul> <li>Campus selection</li> </ul>	6.25
Other than campus	
recruitment	
Entrepreneurship/Self-	2.5
employment	

- 30. Details of Infrastructural facilities
- a) Library: Total no of Text and Reference Books: 407
- b) Internet facilities for Staff & Students:
  - The staff can be able to use wired Internet connectivity as well as Wi-Fi Internet connectivity separately.
  - Apart from staff, students can also utilize the Wi-Fi facility at any time in their classrooms (Room No. S16, S17, S18).
  - Internet facility is also provided for the hostel students at our computer labs in the evening timing.
- c) Class rooms with ICT facility: Room No S16, S17, S18
  - Wired Internet Connectivity, Mounted Screens and LCD Projectors are available in each class room.
- d) Laboratories:

S.No	Name of the Laboratory	Capacity (No of
		<b>Students</b> )
1	IT Lab I	70
2	Project Lab	10
3	Robotics/Wireless Network Lab	18

<sup>31.</sup> Number of students receiving financial assistance from college, university, government or other agencies:

No of Students getting financial support – Government scholarships

	, ,		-
Academic	SC & ST	BC, MBC and	First Generation
Year		DNC	
2011 – 2012	13	34	
2012 – 2013	15	38	55
2013 - 2014	17	24	52
2014 – 2015	4	41	56

<sup>32.</sup> Details on student enrichment programmes (special lectures / workshops / seminar) with external experts:

S.	Special Lectures/ Workshops/	External Expert
No.	Seminars	NA NACE
1	Seminar on "How to do projects	Mr.M.Shanmugasundaram, VCE,
1	on Data Sciences"	Chennai
2	Awareness programme on "First	Dr.S.P.Sivaprakasam, NIT, Trichy
2	Aid and Road Safety"	
	Seminar on "Recent research	Dr. B. K. Tyagi, Director ICMR,
3	trends in Indian Council for	Madurai
	Medical Research"	
	Guest lecture about	Dr.B.J.Pandian, Director, TNAU,
4	"Opportunities for Youth in	Coimbatore
	Precision Agriculture"	
	Entrepreneurship Awareness	Dr. R. Jayaraman,
	Camp	Member Secretary,
	(Entrepreneurship Development	Centre for Entrepreneurship
5	Institute of India, Ahmadabad-	Development,
	DST- NIMAT Project	Tamil Nadu
		Dr. R. Srinivasan,
		Professor,
		SASTRA University, Thanjavur.
	Business line conducted	Mr.W.S.Aruldosskanthiah,
	Guest lecture on "Energy	Outstanding Scientist &Former
6	Options"	Director, Heavy Water Board,
		Dept. of AtomicEnergy, Govt.of India,
		Mumbai
	Guest lecture on "New Venture"	Shri. IdhayamV.R.Muthu, Managing
7		Director, V.V.V. & Sons Edible Oils
		Limited
8	Workshop on PHP	Galaxy Finishing School
9	Workshop on Android App	Pantech Solutions

- 33. Teaching methods adopted to improve student learning: Lecturer with Discussion, Lecturer with Demonstration, and Problem Solving Lecturer with Animated Videos.
- 34. Participation in Institutional Social Responsibility (ISR) and Extension activities

S. No	Name of the Resource Person	Date	Reason of how they contribute to holistic development of students and sustained community development	Beneficiary
1.	Dr. S.Rajpandian	07.04.14	By demonstrating the research findings to the school students of remote areas of the city shall inspire the students to take up projects that will be beneficial to the society. Moreover, they	Velammal CBSE School, Viraganoor.

35. SWOC analysis of the department and Future plans

#### **Strengths:**

- Highly Qualified pool of faculty members
- Various technical clubs to nurture the student's curricular, cocurricular and extra curricular skills.

#### Weakness

- Ambiguity on distribution of roles and responsibilities
- Result oriented academic policies, need to be revised to include research and outreach activities.

#### **Opportunities**

- The department can offer the opportunities to the students through their R&D projects.
- Technical festivals, seminars, workshops and other programmes to be conducted by Tier- I institutes in the country such as IISC, IITs, NITs and Leading Private Institutions.

#### **Challenges**

- No global exposure to the faculty members and students in academics.
- Academic policies in internal calculation are slowdown the performance of good/ average performer and increasing the number of worst performers.

#### **Future plans**

- To be recognized as a research center by Anna University, Madurai
- To establish IoT (Internet of Things) lab and SDN( Software Defined Networks) lab
- To augment research culture and sustainable development in the field of IT.

### EVALUATIVE REPORT DEPARTMENT OF MECHANICAL ENGINEERING

1. Name of the department : Mechanical Engineering

2. Year of Establishment : 2008-2009

3. Names of Programmes / Courses offered (UG, PGand Ph.D.):

UG –B.E (MECH): 2008-09; PG –M.E(Manufacturing Engineering):2012-13 **Vision** 

To prepare our students for meeting global Mechanical Engineering challenges and contributes to the prosperity of the society.

#### Mission

- I. To develop the ability of the students towards meeting diversified Engineering needs of industries and higher education.
- II. To promote students' awareness about the importance of professional ethical practices and the needs of sustainable environment.
- III. To create awareness about innovation which meet the requirement of industry and common people
- IV. To provide opportunities to the students to exhibit leadership, teamwork and effective communication skills

4. Names of Interdisciplinary courses and the departments/units involved

Sl.No.	Subject Name	Department	Regulation / Semester
1	Principles of Management	CSE	R2008 / VI
2	Engineering Thermodynamics	EEE	R2008 / IV
3	Production Management (2,3,4 Units)	MBA	R2008 / III
4	Power plant Engineering (3 <sup>rd</sup> Unit)	EEE (A&B)	R2013/ V

5. Annual/semester/choice based credit system (program wise):

Regulation 2013 – Semester Pattern

- 6. Participation of the department in the courses offered by other departments:Nil
- 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

	Professor	Assoc.Professor	Asst. Professor
Sanctioned	04	06	20
Filled	04	01	18

10. Faculty profile with name, qualification, designation, specialization:

Name	Qualification	Designa -tion	Specializa -tion	No. of Years of Experienc		No.of Ph.D. student guided
		-uon	-uon	Y	M	for the last 4 years
Dr. G.Manikandan	M.E., Ph.D.	Prof / Head	Industrial Engineeri ng	15	4	2

Dr. V.Anbumalar	M.E., Ph.D.	O. Profess Productio or n Engineeri ng		14	8	12
Dr.P.RajeshKanna	M.E., Ph.D., D. Sc.	Profess or	Thermal Engineeri ng	12	2	10
Dr. M.Aruna	M.E., Ph.D.	Profess or	Industrial Engineeri ng	13	6	-
Dr.G.Senthil Kumar	M.E., Ph.D.	Assoc. Prof.	Industrial Engineeri ng	10	11	2
Mr.M.Saravana Mohan	M.E., (Ph.D.)	Asst. Prof– I	Mechatro nics	12	8	-
Mr.R.Ezhilvanan	M.E	Asst Prof–I	Energy Engineeri ng	13	-	-
Mr. T.Kamatchi	M.E., (Ph.D.)	Asst. Prof–II	Productio n	11	3	-
Mr. N.Dineshkumar	M.E., (Ph.D.)	Asst. Prof–II	CAD/CA M	9	10	-
Mr.N.Kannadasan	M.E. (Ph.D.)	Asst Prof–II	Thermal	16	2	-
Mr. M. Maran	M.E., (Ph.D.)	Asst. Prof– III	Manufact uring	4	10	-
Mr.S.Senthilkumar	M.E.,	Asst. Prof– III	Engineeri ng Design	5	-	-
Mr. I. Ambrose Edward	M.E.	Asst. Prof– III	Product Design and Develop ment	2	10	-
Mr.S. Godwin Barnabas	M.E.,M.B.A. (Ph.D.)	Asst. Prof– III	Industrial	4	10	-
Mr.A.ArunSenthil kumar	M.E.(Ph.D.)	Asst. Prof– III	Nano materials and Surface Engineeri ng	4	10	-
Mr.T.Amuthan	M.E.(Ph.D.)	Asst. Prof–	Engineeri ng	5	1	-

		III	Design			
Mr.A.Mothilal	M.E.	Asst.	Engineeri	10	1	-
		Prof-	ng			
		III	Design			
Mr. B. Varunkumar	M.E.	Asst.	Thermal	4	10	-
		Prof-				
		III				
Mr.M.Raja	M.E.	Asst.		3	10	-
Chandra Sekar		Prof-	Industrial			
		III				
Mr.M.VivekPrabh	M.E.	Asst.	CAD/	1	10	-
u		Prof-	CAM			
		III				
Mr. H.Ram	M.E.	Asst.	Thermal	1	10	-
Kumaresh		Prof-				
		III				
Mr.K.Ram Prasad	M.E	Asst.	Industrial	1	-	-
		Prof-				
		III				
Mr.	M.E	Asst.	CIM	-	1	-
T.RamGowtham		Prof-				
		III				

- 11. List of senior visiting faculty : Nil
- 12. Percentage of lectures delivered and practical classes handledby temporary faculty:- Nil
- 13. Student Teacher Ratio (programme wise): 15:1
- 14. Number of academic support staff (technical) and administrative staff; sanctionedand filled

Academic Support Staff	Sanctioned	Filled
(Technical)	08	07

#### 15. Qualifications of teaching faculty with D.Sc/ D.Litt/ Ph.D/ MPhil / PG.:

Name of the	Highest	Preceding
faculty	Degree	degree
Dr. G.Manikandan	Ph.D.	M.E
Dr. V.Anbumalar	Ph.D.	M.E
Dr.P.RajeshKanna	D.Sc	Ph.D.
Dr. M.Aruna	Ph.D.	M.E
Dr.G.Senthil	Ph.D.	M.E
Kumar		

# 16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received

S.No.	Number of faculty with ongoing projects	Funding Agencies	Title of Project	Amount received in Lakhs
1.	Dr.P.RajeshKannaas	Instrumentation	Efficient Approach of	

	PI	Development	Coconut Plucking	23.6
	Dr.G.Manikandan&	Program of	Process – A Human	
	Dr. V.Anbumalar	DST, and	Powered, Safe	
	AS Co-PI	Govt. of India.	Mechanical Device,	
2.	Dr.P.RajeshKanna	DST Project	Investigation of	
		under Fast	Conjugate Heat	6.24
		Track Scheme.	Transfer from a	
			series of blocks	
			mounted over a flat	
			surface in a confined	
			environment	
3.	Mr.M.Saravana	DRDO	Intelligent control	
	Mohan as Co-PI		methods for	10.65
			autonomous	
			underwater vehicle	
			manipulator system	
4.	Mr.M.Saravana	DRDO	Robust and	
	Mohan as Co-PI		intelligent control of	24.7
			underwater robot	
			manipulators	
5.	Dr.G.Manikandan&	DST	Button Feeding	15
	Mr. M.Maran,		machine	
	Mr.			
	M.Arunsenthilkumar			
	as Co-PI			

# 17. Departmental projects funded by DST- FIST;UGC and totalgrants received:Nil

# **18. Research Centre /facility recognized by the University:** Anna University Chennai, 2014-2015

#### 19. Publications:

S. No	Name of faculty	No. of Pub licat ion	Books with ISBN/ISSN no	Citati on Index	SNI P ind ex	SJ R	No.of Publicat ion With impact factor	No.of Publicat ion With h- index
1	Dr.G.Manikan	20	Rejuvenating	8	0.6	0.3	6	2
	dan		Acceptance		36	32		
			Sampling					
			Plan Using					
			Taguchi's					
			Loss Function					
			Approach"					
			published by					
			LAP Lambert					
			Academic					
			Publishing -					

			ISBN-13:					
			978- 3844382303					
2.	Dr.V.Anbumal ar	17	-	1	0.5	0.2 74	1	1
3.	Dr.P.RajeshKa nna	39	-	289	3.1 15	1.5 19	33	10
4.	Dr.M.Aruna	22	1. Design Data- Data book of Engineers (EDITOR) ISBN: BKS58457, KalaikathirAc hchagam, Coimbatore, And Tamil Nadu, India. July 2013 2.Manufacturi ng Metrology and quality control ISBN: 978- 81-927985-1- 6	40	0.4 57	0.2 96	10	3
5.	Mr.G.Senthilk umar	13	-	9	2.1 16	1.2 27	1	1
6.	Mr.M.Saravan amohan	7	-	-	-	-	-	-
7.	Mr.R.Elilvanan	2	-	-	-	-	-	-
8.	Mr.T.Kamatchi	5	-	-	-	-	-	-
9.	Mr.N.Dinehku mar	5	Design of Transmission systems, ISBN No.:978-93- 80686-48-6	-	-	-	<del>-</del>	-
10.	Mr.S.Senthilku mar	0	-	-	-	-	-	-
11.	Mr.M.Maran	12	-	2			2	1
12.	Mr.Godwinbar nabos	14	1. Friction Surfacing and Electroplating	-	-	-	-	-

1		ı	(D.O.O.T.)	1	 1	
			(BOOK)			
			lambert			
			publication			
			ISBN-10:			
			3659363189			
			ISBN-13:			
			978-			
			3659363184.			
			2. Processing			
			Time			
			Minimization			
			for the			
			Production			
			Industry(BOO			
			K) lambert			
			publication			
			ISBN-10:			
			3659202401			
			ISBN-13:			
			978-			
			3659202407.			
			3. "Balancing			
			Spare Parts			
			Demand in			
			the			
			Automobile			
			Sector" -A			
			Case			
			Study(BOOK			
			) lambert			
			publication			
			ISBN-10:			
			3659213969			
			ISBN-13:			
			978-			
			3659213960			
			4. Friction			
			Surfacing and			
			Electroplating			
			(BOOK)			
			lambert			
			publication			
			ISBN-10:			
			3659363189			
			ISBN-13:			
			978-			
			710			

			3659363184.					
13.	Mr.A.ArunSen	1	-	-	-	-	-	-
	thil Kumar							
14.	Mr.I.Ambrose	7	-	_	-	-	-	-
	Edward							
15.	Mr.B.Varunku	1	-	_	-	-	-	-
	mar							
16.	Mr.T.Amuthan	3	-	-	-	-	-	-
17.	Mr.M.Mothilal	1	-	_	-	-	-	-
18.	Mr.Rajachandr	2	-	_	-	-	-	-
	asekar							
19.	Mr.	2	-	_	-	-	-	-
	M.Vivekprabh							
	u							
20.	Mr. H. Ram	1	-	-	-	-	-	-
	Kumaresh							
21.	Mr. N.	1	_	_	-	-	-	-
	Kannadasan							
22.	Mr. K. Ram	3	-	_	-	-	-	-
	Prasad							

20. Areas of consultancy and income generated :

Sl.No	Project	Industry	Income	Year
1.	Design and			
	fabrication of filling	Sri	Rs. 1,83,000	2011
	machine for rockets	KaliswariFireworks,		
	fireworks Industry at	Sivakasi		
	Sivakasi cluster			
2	Market & product	Paramakudi Bio Fuels,		
	survey for Bio-mass	Paramakudi	Rs. 10,000	2011
	Briquette			
3	Vibratory feed	Penguin Garments,	Rs.	2013
	mechanism	Madurai	1,50,000/-	

- **21.Faculty as members in**a)National committees b) International Committees c) EditorialBoards : -
- **22. Student projects:** a) Percentage of students who have done in-house projects including interdepartmental/programme -80%
- b)Percentage of students who have done projects outside the organization 20%

23. Awards / Recognitions received by faculty and students

Sl.No.	Awards	Title	Faculty / Students Name
1	Best Paper	"Center for Innovation and	Dr.G.Manikandan Prof &
	award	Product Development	head, Dr.P.RajeshKanna
			Prof-Dept. of Mech
2	Best	Best Student award	Mr.P.Ganesan (2010-
	Student		2014)
3	Gold	Anna University( II Rank) in	Mr.C.Santhosh (2008-

344

	Medal	2012 batch	2012)
4	Cash	NRDC Invention and	Mr. S. Emmanuel
	award	Innovation Award 2013	Richards, Mr. G.R.
			Malarmannan& Mr. M.
			Venkatesh (2011-2015)
5	Innovator	ICTACT-Student Innovator	Mr. S. Emmanuel
	award	award	Richards (2011-15)

24. List of eminent academicians and scientists / visitors to theDepartment: - 25. Seminars/ Conferences/Workshops organized & the source of funding

Sl.No	Seminars/conferences/workshops organized	<b>Funding Agencies</b>
1.	Sustainable e & I (electronic & Industrial )	CSIR
1.	Waste management - National level Seminar	CSIK
	Green Materials, Manufacturing Technology and	
2.	Applications - GMMTA'14 - National	Nil
	conference	
3.	Recent Trends in Sustainable Energy-RTSE'12	MOES
	Finite Element Method in Dynamic Analysis and	Anna University
4.	Application in Heat Transfer, Fluid Mechanics-	Madurai
	FEMDA'11	Iviauuiai

26. Student profile programme/course wise:

Name of the course/ Program me B.E- Mech	Applic rece	eations ived	Sele	cted	Enrolled			Pass percenta ge	
	Regul ar	Later al	Regul ar	Later al	Male Regul ar	Male Later al	Femal e Regul ar	Fema le Later al	
2007- 2008									-
2008- 2009	58	9	58	9	56	9	2	-	95.5
2009- 2010	48	14	48	14	47	14	1	-	98.3
2010- 2011	56	14	56	14	55	12	1	2	92.9
2011- 2012	58	10	58	10	57	10	1	-	95.5
2012- 2013	114	21	114	21	114	21	-	-	-
2013- 2014	108	24	108	24	108	24	-	-	-
2014- 2015	108	-	108	-	110	-	5	-	-

#### 27. Diversity of Students:

Name of the course	% of students from the same state	% of students from the other state	% of students from abroad
B.E-Mech (2008-2012)	100	-	-
B.E-Mech (2009-2013)	100	-	-
B.E-Mech (2010-2014)	100	-	-
B.E-Mech (2011-2015)	100	-	-

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?

Batch	2007-11	2008-12	2009-13	2010-14
No. of	-	TANCET -5;	TANCET -4	TANCET -5
Students		CAT-1		

29.Student progression

Bradent progression			
Student progression	2008-2012	2009-2013	2010-2014
UG to PG	17.91	22.58	14.28
PG to Ph.D.	-	-	-
Ph.D. to Post-Doctoral	-	-	_
Employed			
Campus selection	83.72	60.41	52.83
• Other than campus recruitment	16.27	35.41	47.16
Entrepreneurship/Self-employment	0.01	0.03	0.04

#### **30.Details of Infrastructural facilities**

#### a) Library

Libiary				
Area of Library	Seating capacity	Working hours	Total No of Text Books	Total No of Specimen Copy
200 Sq. Feet		09.00 A.M to		
(67 Sq m)	20	05.30 P.M	200	150

#### b) Internet facilities for Staff & Students

	Deganintian of the	Computing facilities Available				
S.No	Description of the Room/Laboratory	Server	Computers	Internet	Wi- fi	
1.	Mechatronics Laboratory	-	18	Yes	-	
2.	CAD/CAM Laboratory	01	45	Yes	ı	
3.	Simulation Laboratory	01	32	Yes	ı	
5.	Seminar Hall- III	-	01	Yes	_	
6.	Faculty Room	-	09	Yes	Yes	

#### c) Class rooms with ICT facility

The following facilities are provided by the institution to kindle the self-learning skills of the students.

#### Self-learning mode and modules

➤ Library, Web-based courses with NPTEL, CDs, E- journal facility in Digital library.

#### d) Laboratories

Name of the Laboratory	Total Amount in Lakhs	Capacity(inSq.m.)
Workshop	7.65	900
Mechatronics Lab	7.5	250
Manufacturing Technology Lab	26.50	300
Metrology and Measurement Lab	2.00	300
Dynamics Lab	7.00	300
Thermal Lab - I	17.36	300
Thermal Lab - II	4.25	250
CAD /CAM Lab	41.00	300

31. Number of students receiving financial assistance from college, university, Government or other agencies

Sl.No.	Year	BC/MBC/DNC/SC/ST Scholarship
1	2010-11	67
2	2011-12	65
3	2012-13	67
4	2013-14	70

# **32.**Details on student enrichment programmes (special lectures / workshops /Seminar) with external experts

S.No.	Program	Expert	Designation &Company
	Mecosparx 2011	Mr.A.Vasudevan	Head(Education &
1.			Training),Lucas TVS Limited
			Chennai
2.	Recent Trends	Er.A. Syed	Deputy General Manager,
	in Renewable	Ahamed	Tamilnadu Energy
	Energy		Development Agencies,
			Madurai
3.	Mecosparx 2012	Shri. K. Srinivasan,	Senior General Manager,
			TV SundaramIyengar and
			Sons, Madurai
4.	Mexuberance	Col. SL. Simeon,	General Manager (TA), Neyveli
	2012		Lignite Corporation Limited

### 33. Teaching methods adopted to improve student learningthe following for the mode of delivery of courses.

Modes of Delivery:Lecture with Explanation, Videos, Animations, Web information, Memorization, Readings, Lecture with Demonstration - Software demo, Hardware demo, Model demo, Discussion with students, Demonstrate with laws& theories, Analysis with real world problems, Case Study analysis, Seminar, Reviews

### 34.Participation in Institutional Social Responsibility (ISR) and Extension activities

In order to create awareness about theenvironment and Societal responsibilities among the students community, Velammal College of Engineering and Technology has set up "Eco Club" and NSS.

Sl.No.	Voor	No. of Student members		
S1.1NO.	Year	Eco Club	NSS	

1	2010-11	-	12
2	2011-12	-	11
3	2012-13	11	16
4	2013-14	13	27

35.SWOC analysis of the department and Future plans

55.5 WUC analysis of	-	-	CI II
Strength	Weakness	Opportunities	Challenges
<ul> <li>Brand Image</li> <li>Competent faculty (average 8 years of experience).</li> <li>R&amp;D Culture</li> <li>Excellent Infrastructure</li> <li>High quality of teaching</li> <li>Center for Innovation and Product Development</li> <li>Consultancy work in the field of Automation and Bio fuels</li> </ul>	<ul> <li>Lack of cooperation from parents towards students academic and other achievements.</li> <li>Placement opportunities for students in core companies</li> </ul>	<ul> <li>Encouragement from Management for R&amp;D and Consultancy works</li> <li>Need for Interdisciplinar y research</li> <li>Public Enquiries for R&amp;D</li> <li>Centralised exam for Recruitment</li> <li>Need for Innovation</li> <li>Need for Leadership Qualities</li> <li>Training the students for exams like GATE</li> </ul>	<ul> <li>Attitude of Students</li> <li>Dwindling placements in Software sector</li> <li>Less emphasis on projects/papers</li> <li>Indiscipline among students</li> <li>Unharmonious Student-Teacher Relationship</li> </ul>

#### **Future Plan:**

- Improving students' performance through teaching& learning process
- Signing MOU with core companies
- Strengthening of Research & Development laboratory and Department Library
- Modernization of Laboratories.

# EVALUATIVE REPORT OF SCIENCE AND HUMANITIES

### EVALUATIVE REPORT DEPARTMENT OF CHEMISTRY

1. Name of the department - Chemistry

**VISION** 

TO IMPART QUALITY EDUCATION IN CHEMISTRY TO ENGINEERING AND TECHNOLOGY STUDENTS MISSION

THE DEPARTMENT LAYS EMPHASIS ON COMPREHENSION AND APPRECIATION OF CHEMISTRY IN ENGINEERING APPLICATIONS AND SERVICE TO HUMANKIND

- 2. Year of Establishment: 2007
- 3. Names of Programs / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.) :NA Supporting Department
- 4. Names of Interdisciplinary courses and the departments/units involved: NA
- 5. Annual/ semester/choice based credit system (programme wise): NA
- 6. Participation of the department in the courses offered by other departments: NA
- 7. Courses in collaboration with other universities, industries, foreign institutions, etc.: NA
- 8. Details of courses/programs discontinued (if any) with reasons
- 9. Number of Teaching posts

Designation	Sanctioned	Filled
Professors Associate	-	-
Professors	-	1
Asst. Professors	-	8

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. Geetha Sivasubramanian	M.Sc., M.Phil., Ph.D	Professor	Physical Chemistry	37	-
2.	Mrs. S.Lavanya	M.Sc., M.Phil.	Assistant Professor -III	Organic Chemistry	10	-
3.	Mrs. K.Kiruthiga	M.Sc., M.Phil.	Assistant Professor -III	Physical Organic Chemistry	10	-
4.	Mr. V. Gopalakannan	M.Sc., M.Phil.	Assistant Professor -III	Photo chemistry	12	-
5.	Mrs. D.Usha	M.Sc., M.Phil.	Assistant Professor -III	Nano Chemistry	10	-
6.	Mr. M. Murali Sankar	M.Sc., M.Phil.	Assistant Professor	Corrosion Chemistry	9	-

			-III			
7.	Dr.	M.Sc.,	Assistant	Industrial	9	-
	K.Suganandam	M.Phil.,	Professor	Chemistry		
		Ph.D	-III			
8.	Mrs. K.M.Saranya	M.Sc.,	Assistant	Nanochemistry	3	-
		M.Phil.	Professor			
			-III			
9.	Dr. R.	M.Sc.,	Assistant	Coordination	8	-
	Shanmugakala	M.Phil.,	Professor	Chemistry		
		Ph.D	-III			

- 11.List of senior visiting faculty: NA
- 12. Percentage of lectures delivered and practical classes handled (program wise) by temporary faculty: NA
- 13. Student -Teacher Ratio (program wise): NA
- 14. Number of academic support staff (technical) and administrative staff; sanctioned and filled

Designation	Sanctioned	Filled
Lab Technician	-	1
Lab Assistant	-	1
Lab Attender	-	1

15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil / PG.

Name of the faculty	Highest Qualification	Previous Qualification
Dr.Geetha Sivasubramanian	Ph.D.	M.Phil., M.Sc
Mrs. S.Lavanya	M.Phil	M.Sc
Mrs. K.Kiruthiga	M.Phil	M.Sc
Mr. V. Gopalakannan	M.Phil	M.Sc
Mrs. D.Usha	M.Phil	M.Sc
Mr. M. Muralisankar	M.Phil	M.Sc
Dr. K.Suganandam	M.Phil	M.Sc
Mrs. K.M.Saranya	M.Phil	M.Sc
Dr. R.Shanmugakala	Ph.D	M.Phil., M.Sc

- 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: NA
- 18. Research Centre /facility recognized by the University: Yes, Anna University Chennai
- 19. Publications:

S.	Name of faculty	Citatio	SNIP	SJR	Publicatio	Publications	h-
N o		n Index	index Avg	Avg	n With impact factor	listed in internationa l database	inde x
1.	Dr.R.Shanmugakala	1	0.84	0.47	1.599	1	1
2.	Mr.V.Gopalakannan	1	1.42	0.86	3.096	1	1

20. Areas of consultancy and income generated Water Analysis:

- (i) Velammal College of Engineering and Technology
- (ii)Velammal Educational Trust
- (iii) Project work Final year civil students of Vickram College of Engineering and Technology Fund generated Rs.520
- 21. Faculty as members in: National committees b) International Committees c) Editorial Boards....: Nil
- 22. Student projects: NA
- 23. Awards / Recognitions received by faculty and students
- Dr. Geetha Sivasubramanian ,Professor and HOD was awarded the Best Woman Award -2012 in the field of Education by the Velammal Educational Trust
- $24.\ \ \,$  List of eminent academicians and scientists / visitors to the department :  $2010\mbox{-}2015$

S.No   Year   Eminent Academicians / Scientists	II.
1. 2010 Mr. M. B. Nirmal, Founder and	l Chairman,Exonora
International, T Nagar, Chennai	
2. 2010 Dr. M Vetrichelvan, Scientific Manager, B	SIOCON Bangalore
3. 2010 Dr. V. K. Senthurpandian, Assistant Pro-	fessor, Department of
Chemistry, Anna University, Trichy	
4. 2011 Dr. K. Muruga Poopathi Raja, Assistan	t Professor, Dept. of
Physical Chemistry, School of Chemist	try Madurai Kamaraj
University, Madurai	
5. 2011 Dr. R. Jayavel, Anna University, Chennai	
6. 2011 Dr.T. Praddeep, IIT, Madras	
7. 2011 Dr.M. Thirumavalavan, BHEL, Bangalore	2
8. 2011 Dr. V.N. Mani, C-MET, Hyderabad	
9. 2012 Dr. Km. Kathiresan, Associate profes	ssor, Department of
Mathematics ANJA College, Sivakasi	_
10. 2012 Dr. S. Arumugam, Senior Profess	or, Department of
Mathematics, Kalasalingam University	-
11. 2012 Dr.P.Venuvanalingam, Professor, De	ept. of Chemistry,
Bharathidasan University, Tirchy	
12. 2012 Dr. A. K. Madan, Professor, Pt.B.D. S	harma University of
Health Sciences, Rohtak, Haryana	·
13. 2013 Dr. G. Gnanakumar, Assistant Profes	ssor, Department of
Physical Chemistry, School of Chemist	ry, Madurai Kamaraj
University	3
14. 2013 Dr. Kamachi Mudali, Professor, Hor	ni Bhabha National
Institute (University), DAE, Indira Gand	
Research, Kalpakkam	
15. 2013 Dr. S. Sathiyanarayanan, Senior Princi	ipal Scientist, CECRI,
Karaikudi	, - ,
16. 2013 Dr. M. Kumaravel, ASP/HOD,Chemis	stry Department,PSG
College of Technology, Coimbatore	• •
17. 2013 Dr. N. Rajendran, Professor, Chemist	ry Department, Anna
University, Chennai	1
18. 2013 Dr. N. Palaniswamy, Head, Corrosion	Protection CECRI,

		Karaikudi
19.	2013	Dr. J. Annie Peter, Chief Scientist & Head, Structural Testing
		Laboratory, SERC, Chennai
20.	2013	Dr. V. Saraswathi, Senior Principal Scientist, CECRI,
		Karaikudi
21.	2014	Dr. R. Mayilmurugan, Assistant Professor, Department of
		Physical Chemistry, School of Chemistry, Madurai Kamaraj
		University
22.	2014	Dr. R. Madhanagopal, Professor, Department of Political
		Science, Madurai Kamaraj University, Madurai
23.	2014	Dr. V.S.Vasantha, Associate Professor, Natural Products
		Chemistry, School of Chemistry, Madurai Kamaraj University,
		Madurai
24.	2014	Dr.N.S.Murali Srinivasan, Plastic Technology Consultant
		Madurai
25.	2015	Shri.N.Sivasubramanian, Senior Scientist, & chief general
		manager (Rtd), ISRO, Thiruvanandapuram

a. Seminars/ Conferences/Workshops organized & the source of funding a) National

S.No	Year	Programme	Funded By
1.	2010 -11	National Level Seminar on "Global Warming"	MoEF
2.	2011 -12	Two-Day National Level Seminar on "Solar Energy Conversion with Nanoparticles"	DRDO
3.	2012 -13	Two-Day National Level Seminar on "Chemical Graph Theory"	DRDO
4.	2013 – 14	Two-Day National Level Seminar on "Recent Trends in Corrosion Studies"	CSIR

b.International: Nil

- 26. Student profile programme/course wise: NA
- 27. Diversity of Students: NA
- 28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc. ? NA
- 29. Student progression: NA
- 30. Details of Infrastructural facilities
- a.Library A modest department library with 196 books
- b. Internet facilities for Staff & Students Internet facilities available for the department and wi-fi from CSE and IT
- c.Class rooms with ICT facility The LCD projector of the department is used for ICT enabled teaching
- d.Laboratories: Chemistry Laboratory Area: 408.89m<sup>2</sup>
- 31. Number of students receiving financial assistance from college, university, government or other agencies : NA
- 32. Details on student enrichment programmes (special lectures / workshops / seminar) with external experts

	L	,	1			
Sl. No	o. of	2010 -11	2011 -12	2012 -	2013 -	2014 -

No	Program			13	14	15
1	Seminar/	National	Two Day	Two	Two	-
	Workshop/	level	National	Day	Day	
	Conference	Seminar	Level	National	National	
		on 'Global	Seminar on	Level	Level	
		Warming'	'Solar	Seminar	Seminar	
			Energy	on	on	
			Conversion	'Chemic	'Recent	
			with	al Graph	Trends	
			nanoparticl	Theory'	in	
			es'		Corrosio	
					n	
					Studies'	
2	Training	Quiz &	Quiz &	Quiz &	Quiz &	Poster
	programs	Essay	Essay	Essay	Essay	Making,
		Competiti	Competitio	Competi	Competi	Chemist
		on	n	tion	tion	ry
						Cross-
						word
						&Elocut
						ion
						competi
						tion

33. Teaching methods adopted to improve student learning:

a) Lecture method

e) Group Work

b) Demonstration

f) Seminars

c) Audio-Visual Aids

g) Assignments

d) Quiz

34. Participation in Institutional Social Responsibility (ISR) and Extension activities:

The department is coordinating Eco – club. The main objectives of the club are to utilize eco friendly energy sources, to maintain green campus and clean classrooms, making paper less communication and to manage solid wastes. The plans of action of the club are: Planting trees in and around the hostels and college campus leading to aesthetic environment.

- ✓ Making a case study of the solid waste produced in our campus and managing the same.
- ✓ Creating awareness about minimizing the use of plastics together with reuse and recycle of plastics, by conducting competitions.
- ✓ Ensuring the quality of potable water in the college campus.
- ✓ Aiming towards paperless communication.

#### ECO CLUB ACTIVITIES - From 2010 to 2015

S.No.	Date	Name of the	Reason of how they	No. of
		Event	contribute to holistic	<b>Students</b>
			development of students	Enrolled
			and sustained community	
			development	
1.	19.9.2013	Tree	The event has created an	30

2.	5.10.2013	Plantation in Girls and Boys hostels  Webinar on 'Good Bye Global Warming and Bye Bye Pollution' organized by	awareness for the need to rejuvenate our environment and create an aesthetic and peaceful surroundings congenial for promoting biodiversity and for humankind  This world- wide webinar was an eye opening exercise for the students on Global warming and its consequences as the seminar covered talks by eminent environmentalists.	66
3.	27.2.14	ExNora Youth wing Collage Competition	This exercise was mainly to help students realise the	16
			importance of reuse and recycle of waste. The students had come out with creative ideas in reusing and recycling. The prize winning collage posters were displayed in the bulletin boards.	
4.	17.7.14	Release of Awareness Stickers – Do Not LitterSave waterSave electricity Sva eour earthWe have nowhere else to go	To create the self responsibility of keeping the college campus clean, stickers were posted in all the classrooms so that students will read the phrases every day and imbibe the same.	For all classrooms
5.	16.9.14	Internal day for Preservation of Ozone Layer Organized by Assist World record – Record Riser	All the institutions under the umbrella of Velammal Educational Trust took the oath for preserving the Ozone layer on 16.9.15 at various parts of Tamil Nadu To create an individual ownership in preserving the environment	80.000 staff and students.

6.	28.2.15	Painting Competition – My dream My India – Organized by Assist World Record and Record Riser - Pondichery	aesthetic talent as well as the	30
7.	24.3.15	water ; Air Quality –	the World Water day and World Meteorological Day, Accomplished the aim of conduct of such competitions viz- collecting relevant	45

35. SWOC analysis of the department and Future plans:

55. S w OC analysis of the department and	a ruture plans.
STRENGTHS	WEAKNESSES
❖Team spirit	❖Difficulty faced in changing the
<b>❖</b> Able leadership	attitude of students
High quality of teaching	<b>❖</b> Lack of sophisticated instruments
❖Regularity in coaching classes	<b>❖</b> Lack of accessibility to journals
<b>❖</b> Concern for women welfare	<b>❖</b> Low R & D thrust
❖Highly cooperative non-	
teaching staff	
❖Two Ph.D. holders	
❖Two have registered for Ph.D.	
Equipped laboratory	
❖Availability of computers with	
internet facility	
<b>❖</b> Conduct of quality seminars,	
kindling the aptitude for	
research	
❖Good collection of books in the	
library	
❖A small beginning towards	
department library	
<b>❖</b> Uniformity in valuation of	
answer sheets based on	
scheme of valuation	

### **OPPORTUNITIES**

- Encouragement from management for conduct of seminars and FDP
- ❖Funding agencies for R&D, seminar and FDP
- Cooperation from subject experts from other reputed institutions
- ❖Invitations from other institutions to present papers
- Reputed universities located nearby for pursuing research
- Willing Engineering departments to plan interdisciplinary work

## CHALLENGES

**❖**Lack of response from funding agencies for R & D

### Future Plans

- 1.To submit project proposals and obtain funds to strengthen th r 7 D activities of the department
- 2.To equip the laboratory to the research level
- 3.To diversify the consultancy work

## EVALUATIVE REPORT DEPARTMENT OF ENGLISH

1. Name of the department : ENGLISH

#### Vision

To realize through English language competency the academic excellence resulting in employable persons with rounded personality

#### Mission

- To encourage and insist on the extensive use of English language
- To adopt innovative, interactive and technology driven teaching
- To assist in the preparation for career advancement avenues like TOEFL, IELTS, BEC, GRE and other proficiency exams
- To prepare and exploit the potential for placement
- To arrange for personality development activities
- 2. Year of Establishment : 2007
- 3. Names of Programs / Courses offered (UG, PG,Ph.D.): Supporting department
- 4. Names of Interdisciplinary courses and the departments/units involved: Not Applicable
- 5. Annual/ semester/choice based credit system (programme wise): Not Applicable
- 6. Participation of the department in the courses offered by other departments: Not Applicable
- 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

	Professor	Assoc.Professor	Asst. Professor
Sanctioned	1	Nil	6
Filled	1	Nil	6

10. Faculty profile with name, qualification, designation, specialization:

Faculty	Qualification	Designation	Specialization	No. of years of Experience	Date of relieving	No. of Ph.D students guided for the last 04 years
Dr.T.Smiles	M.A. M.Phil. Ph.D.	Prof. & Head	English Litt.	27 years		01
Mr.S.Ramasamy	M.A. M.Phil.	A P-II	English Litt.	15	-	-
Mrs. K.SasiRekha	M.A. M.Phil.	AP-II	English Litt.	14 years 06 months		-
Mr.K.Sathyasai	M.A.Ph.D	AP-II	English Litt.	12	-	-
Dr.S.P.Vanjulavalli	M.A. M.Phil. Ph.D.	AP-III	English Litt.	12	10.04.15	-
Dr.D.Jockim	M.A. M.Phil. Ph.D.	AP-III	English Litt.	5	07.08.14	-
Dr.R.Vivekaanandhan	M.A. M.Phil. Ph.D.	AP-I	English Litt.	35	-	-
Dr.S.M.Nandini	M.A. M.Phil. Ph.D.	AP-III	English Litt.	19	10.04.15	-
Dr.N.Kalaivani	M.A. M.Phil. Ph.D.	AP-III	English Litt.	11	09.01.15	-

Dr.Sujatha	M.A. M.Phil.	AP-III	English Litt.	-	-	-
	Ph.D.					
Mrs.J.RachelBhuvanes	M.A. M.Phil.	AP-III	English Litt.	10 years, 08		-
wari				months		
Dr.R.Ananthbabu	M.A. M.Phil.	AP-I	English	14 years, 10	Aug	-
	Ph.D.B.Ed.		Language	months	2015	
	PGDTE.		Teaching			
Ms.EstherBlessy	M.A. M.Phil.	AP-III	English Litt.	01 year		-

- 11. List of senior visiting faculty: Nil
- 12. Percentage of lectures delivered and practical classes handledby temporary faculty:Nil
- 13. Student Teacher Ratio (program wise): Not Applicable
- 14. Number of academic support staff (technical) and administrative staff, sanctioned and filled:

	Sanctioned	Filled
Academic Support Staff (Technical)	1	1

15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ Mphil / PG.:

Faculty	Highest Experience	PreceedingQualification
Dr.T.Smiles	Ph.D.	M.Phil.
Mrs. K.SasiRekha	M.Phil.	M.A.
Mrs.J.RachelBhuvaneswari	M.Phil.	M.A.
Ms.EstherBlessy	M.Phil.	M.A.

- 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 totalgrants received:Nil
- 18. Research Centre /facility recognized by the University: Anna University Chennai

#### 19. **Publications:**

S. No	Name of faculty	No.of Publication	Chapter in books	Books with ISBN/ISSN no	Citation Index	SNIP index	SJR	No. of Publication With impact factor	No. of Publication With-index
1	Dr.D.Jockim	2	-	ISBN: 978-81- 908822-6-2, 978- 93-82630-50-0	-	-	-	-	-
2	Mrs.J.RachelBhuvaneswari	1	-	ISSN 1930-2940	-	-	-	-	-
3	Dr.S.P.Vanjulavalli	1		ISSN 0971-2321					
4	Dr.S.M.Nandini	4		ISBN 978-93-80767- 22-2, 978-81-920310- 1-9, 0971-2321 Vol 26 No.1, Vol 2:3 - 1930- 2940	-	-	-	-	-
5	Mrs.K.Sasirekha	1	-	ISBN: 978-91- 908397-9-2	-	-	-	-	-

20. Areas of consultancy and income generated : Nil

- 21. **Faculty as members in**a)National committees b) International Committees c) EditorialBoards : Nil
- 22. **Student projects:** a)Percentage of students who have done in-house projectsincluding interdepartmental/programme: NA
  - b) Percentage of students placed for projects in organizations outside the institution i.e. in research laboraties/industries/other agencies: NA
- 23. Awards / Recognitions received by faculty and students: NIL
- 24. List of eminent academicians and scientists / visitors to the Department

S.No	Year	Name of the	Designation	Organization	Purpose of visit
		academician/scientist			
1	2014	Dr.K.Elango,	Prof.& Head	Anna University	To grant Research
					Centre status to the
					Dept.
2	2014	Dr.S.Jeyanthi	Prof. &Head	University	To grant Research
				College Campus-	Centre status to the
				Thirunelve;li	Dept.
3	2014	Dr.K.Subramaniampillai	Prof. &Head	University	To take part in
				College Campus-	university sponsored
				Dindigul	FDP.

25. Seminars/ Conferences/Workshops organized & the source of funding

S.No	Seminars/conferences/workshops organized	<b>Funding Agencies</b>
1.	A Two Day FDP "Interactive Teaching Techniques"	Anna University Madurai,

- 26. Student profile programme/course wise: NA
- 27. Diversity of Students: NA
- 28. How many students have cleared national and state competitive examinations suchas NET, SLET, GATE, Civil services, Defense services, etc.?NA
- 29. Student progression: NA
- 30. Details of Infrastructural facilities:

#### Library:

Area	No. of books
81 sq.m.	188

#### **Internet facilities for Staff & Students**

S.No	Description of the	Computing facilities Available				
5.110	Room/Laboratory	Server	Computers	Internet	Wi-fi	
1.	English Language Lab.	1	37	Available	Nil	
2	Faculty Room	-	3	Available	Nil	

- 31. Number of students receiving financial assistance from college, university, Government or other agencies: NA
- 32. Details on student enrichment programmes (special lectures / workshops /Seminar) with external experts

S.N o	Special lectures/workshops/semin ar	External Experts Designation/Organization
1.	Placement Opportunities	Captain M.Kanagavel of Tirunelveli
2.	Valedictory Function	Dr.ThayyalNayaki,Principal,Nazia college
		of Arts&science,Kariyapatti

3.	Appearing an Interview	Ms.PoojaBalu,Indian Journalist& her volunteers,projects abroad
4.	Movie review & its kind	Ms.PoojaBalu,Indian Journalist& her volunteers,projects abroad
5.	Parts of an article	Ms.PoojaBalu,Indian Journalist& her volunteers,projects abroad
6.	Traditional Vs Newmedia	Ms.PoojaBalu,Indian Journalist& her volunteers,projects abroad
7.	Hierarchy of a magazine, article reading session	Ms.PoojaBalu,Indian Journalist& her volunteers,projects abroad
8.	The right approach to teaching and learning of English Language	Dr.N.Sivaraman, former Principal,Govt.ArtsCollege,Namdanam,Che nnai
9.	Inauguration Function	Dr.A.Ravikumar, Prof&HoD/ENG/KLNCE/MDU
10.	Jargons used in Journalism	Ms.PoojaBalu,Indian Journalist& her volunteers,projects abroad
11.	BEC Exam Orientation Program	Mr.Sathish,Freelancer Cambridge University Press

# 33. Teaching methods adopted to improve student learningthe following for the mode of delivery of courses.

Lecture Method/Audio-visual lab.usingHP & PPT, LCD/ Online sources/Newspaper Materials and interactive methods

# 34. Participation in Institutional Social Responsibility (ISR) and Extension activities

English only atmosphere, Cultural event activity, Literary Event activities, Anti ragging,

Anti ragging,				
35. SWOC analysis of the department and Future plans				
Strength				
An approved Research Centre of Anna University for Ph.Dprogrammes				
A Result oriented coaching since inception (>98%)				
A fine blend of youth and experienced faculty members				
A trainer for internationally acclaimed BEC programme				
An Expertise sharing with teaching community				
A Good liaison with local media				
Weakness				
Wanting funded projects				
Yet to offer consultancy services				
Opportunities				
With NAAC accreditation, we have a realistic chance of getting funded				
projects				
Challenges				
To create an awarenessof English Language among Tamil medium				
school/college students.				
To maintain an unadulterated English Only Atmosphere at VCET campus				

**Future plans:** To Take up Career advanced programmes like IELTS,TOEFL To trainfor teaching community through FDP Programs

## EVALUATIVE REPORT DEPARTMENT OF MATHEMATICS

### 1. Name of the department :MATHEMATICS

#### Vision

To emerge and sustain as a center of excellence in Mathematics by improving overall quality of mathematics among engineering students.

#### **Mission**

- To extend valuable support in producing competent engineers.
- To teach Mathematical skills with emphasis on engineering education.
- To inculcate analytical thinking and logical reasoning among the students.
- 2. Year of Establishment :2007
- 3. Names of Programmes / Courses offered (UG, PG,,Ph.D.) : NA
- 4. Names of Interdisciplinary courses and the departments/unitsinvolved: NA
- 5. Annual/semester/choice based credit system (programme wise): NA
- 6. Participation of the department in the courses offered by other departments : NA
- 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

	Professor	Assoc.Professor	Asst. Professor
Sanctioned	1	Nil	10
Filled	1	Nil	10

10. Faculty profile with name, qualification, designation, specialization:

Name	Qualification	Designatio n	Specializatio n	No. of Years of Experienc e		No.of Ph.D. student s guided
				Y	M	for the last 4 years
Dr.S.Velammal	M.Sc.,Ph.D.	Prof. & Head	Graph Theory	19	-	4
Dr.S.Karthikey an	M.Sc.,M.Phil.,Ph.D.	Asst.Prof	Functional Analysis	17	-	3
S.Meenakshi	M.Sc.,M.Phil., PGDCA	Asst.Prof- II	Graph Theory	17	9	Nil
A.Maheswari	M.Sc.,M.Phil.,	Asst.Prof- II	Fuzzy algebra	16	6	Nil
K.Pitchaimani	M.Sc.,M.Phil.,	Asst.Prof- II	Graph Theory	15	-	Nil
K.Lakshmi	M.Sc.,M.Phil.,	AsstProf- III	Fuzzy Graph Theory	11	6	Nil
Dr.M.Geethara ni	M.Sc.,M.Phil.,Ph.D.,B. Ed.	AsstProf- III	Stochastic Inventory models	18	6	Nil

S.Balamurugan	M.C. M.Dhil	AsstProf-	Fuzzy	10	6	Nil
	M.Sc.,M.Phil.,	III	algebra			
M.Sornavalli	M.Sc.,M.Phil.,	AsstProf-	Fuzzy	7	5	Nil
	PGDCA	III	algebra			
E.Subha	M.C. M.Dhil	AsstProf-		6	2	Nil
	M.Sc.,M.Phil.,	III				
R.Prabakaran		AsstProf-	Stochastic	5	1	Nil
	M.Sc.,M.Phil.,B.Ed.	III	with			
			Inventory			

- 11. List of senior visiting faculty: NIL
- 12. Percentage of lectures delivered and practical classes handled by temporary faculty: N $\rm IL$
- 13. Student Teacher Ratio (programme wise) : NA
- 14. Number of academic support staff (technical) and administrative staff; sanctioned and filled

	Sanctioned	Filled
Academic Support Staff (Attender)	1	1

### 15. Qualifications of teaching faculty with D.Sc./ D.Litt./ Ph.D./ M.Phil. / PG

Name of the faculty	Highest Degree	<b>Previous Degree</b>
Dr.S.Velammal	Ph.D.	M.Phil.
Dr.S.Karthikeyan	Ph.D.	M.Phil.
S.Meenakshi	M.Phil.	M.Sc, PGDCA.
A.Maheswari	M.Phil.	M.Sc
K.Pitchaimani	M.Phil.	M.Sc
K.Lakshmi	M.Phil.	M.Sc
Dr.M.Geetharani	Ph.D.	M.Phil., B.Ed.
S.Balamurugan	M.Phil.	M.Sc
M.Sornavalli	M.Phil.	M.Sc, PGDCA.
E.Subha	M.Phil.	M.Sc
R.Prabakaran	M.Phil.	M.Sc,,B.Ed.

# 16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received

	8 8		
S.No.	Number of faculty with ongoing projects	Funding Agencies	Amount received in Lakhs
1.	Mathematics Popularisation and communication on Mathematics Enrichment two year efficient programme series-ME <sup>3</sup> series - Department Project.	DST	3.18

# 17. Departmental projects funded by DST - FIST;UGC,DBT,ICSSR, etc. and totalgrants received:NA.

# **18. Research Centre/facility recognized by the University:** Anna University Chennai, 2014-2015

### 19. Publications:

S. N	Name of faculty	No.of Public ation	Chap ter in books	Books with ISBN/ ISSN no	Cita tion Inde x	SN IP ind ex	SJ R	No. of Publi catio n With impa ct facto	No. of Publi catio n With hinde
1	Dr.S.Velammal	13	Nil	Nil	Nil	Nil	Nil	13	Nil
2	Dr.S.Karthikeyan	04	Nil	Nil	Nil	Nil	Nil	04	Nil
3	A.Maheswari	04	Nil	Nil	Nil	Nil	Nil	04	Nil
4	Dr.M.Geetharani	10	Nil	Nil	Nil	Nil	Nil	10	Nil
-	BillingCommandin								

- 20. Areas of consultancy and income generated : NIL
- **21**. **Faculty as members in**a)National committees b) InternationalCommittees c) EditorialBoards : NIL
- **22. Student projects:** a)Percentage of students who have done inhouse projects including interdepartmental/program:Supporting Department
- 23. Awards / Recognitions received by faculty and students: NIL
- 24. List of eminent academicians and scientists / visitors to the Department

<u> </u>	24. List of eniment academicians and scientists / visitors to the Department					
S. No.	Academicians &Scientists/Visitors	Designation/Organization	Purpose of visit and year			
1.	Dr.A.K.Mathan	Professor, PtB.D.Sharma University of Health Sciences, Rohtak, Haryana.	Seminar (2012)			
2.	Dr. Venuvanalingam	Professor, Dept. of Chemistry, Bharathidhasan University, Trichy.	Seminar (2012)			
3.	Dr.S.Arumugam	Senior Professor, Dept. of Mathematics, KalasalingamUniversity,KrishnanKovil.	Seminar (2012)			
4.	Dr.Km.Kathiresan	Associate Professor, Dept. of Mathematics, ANJA College, Sivakasi.	Seminar (2012)			
5.	Dr. B. Rajendran	Prof.& HOD/ Mathematics, MepcoSchlenk College of Engineering, Sivakasi.	Department association activities (2013)			
6.	Dr. A. Loganathan	Prof. & Head, Department of Statistics,	Workshop (2013)			

		Manonmaniyam Sundaranar University,	
		Tirunelveli.	
7.	Dr. N. Anandam	Advisor,	Workshop
		Virudhunagar	(2013)
		HinduNadar'sSenthilkumaraNadar	
		College, Virudhunagar.	
8.	Dr. J.K. Subhashini		Department
		Professor and Head/Maths, KLNCE,	association
		Madurai.	activities
			(2014)

25. Seminars/ Conferences/Workshops organized & the source of funding

S.No	Seminars/conferences/workshops	Funding
3.110	organized	Agencies
	"Two Days Seminar in Chemical Graph	
1.	Theory" in association with Chemistry	DST
	Department.	

- **26. Student profile programme/coursewise:** Supporting Department
- 27. Diversity of Students: NA
- 28. How many students have cleared national and state competitive examinations such s NET, SLET, GATE, Civil services, Defense services,
- etc.? NA -Supporting Department
- 29. Student progression: Supporting Department
- 30. Details of Infrastructural facilities
- a) Library NIL
- b) Internet facilities for Staff & Students

S.No	Description of the	Computing facilities Available			
5.110	Room/Laboratory	Server	Computers	Internet	Wi-fi
1.	Mathematics department		2	yes	yes

- 31. Number of students receiving financial assistance from college, university, Government or other agencies: NA
- **32.** Details on student enrichment programmes (special lectures / workshops /Seminar) with external experts

/DCIII	semmar) with external experts					
S.N o	Special lectures/workshops/se minar	External Experts Designation/Organization				
1.	"Two Day Seminar	Dr.A.K.Mathan				
	in Chemical Graph	Professor,				
	Theory" in	Pt.B.D. Sharma University of Health Sciences,				
	association with	Rohtak, Haryana.				
	Chemistry	Dr.Venuvanalingam				
	Department.	Professor,				
		Dept. of Chemistry, Bharathidhasan University,				
		Trichy.				
		Dr.S.Arumugam				
		Senior Professor, Dept. of Mathematics,				
		KalasalingamUniversity,KrishnanKovil.				

		Br.Km.Kathiresan
		Associate Professor, Dept. of Mathematics, ANJA
		College, Sivakasi.
2.	Seminar in "Lack of	Dr. B. Rajendran
	awareness about	Prof.& HOD/ Mathematics,
	Mathematics in	MepcoSchlenk College of Engineering, Sivakasi.
	Engineering"	
3.	Workshop on "Linear	Dr. A. Loganathan
	Algebra, Estimation	,Prof. & Head,
	Theory and Multi	Department of Statistics, Manonmaniyam Sundaranar
	Variate Analysis"	University, Tirunelveli.
		and
		Dr. N. Anandam
		Advisor, Virudhunagar Hindu Nadar's Senthilkumara
		Nadar College, Virudhunagar.
4.	Guest lecture on	D IV GIL I''
	"Mathematical Skills	Dr. J.K. Subhashini,
	Needed for	Professor and Head/Maths, KLNCE, Madurai.
	Engineers"	
5.	Training Programme	
	on "Vedic	Brain Carve Edu Care India Pvt. Ltd., Chennai.
	Mathematics"	Zimi Guz i Zuu Guz maiu i in Ziun, Gileimui
	1.14diloilladios	

# 33. Teaching methods adopted to improve student learningthe following for the mode of delivery of courses.

Lecture Method

# 34. Participation in Institutional Social Responsibility (ISR) and Extension activities

Cultural event activity, Literary Event activities, Stationary Distribution, Anti-ragging

35. SWOC analysis of the department and Future plans

Strength	Weakness	Opportunities	Challenges	
Faculties with strong background in Engineering Mathematics and having grant from funding agencies.	Research activities yet to be improved. Grants and funding programmeshas to be increased.	Funding Agencies available to apply. To publish textbooks by the faculty.	Maintain 100% results in university examinations	

## **Future Plan:**

- 1. We have planned to produce above 95% result in all semester.
- 2. Our faculty have planned to publish 2 articles in National and 2 articles in International journals.
- 3. To conduct State level Quiz Competition.

- 4. To conduct the state level competitions for plus two and college students to enrich the knowledge in subject.5. To conduct National level conference.
- To conduct intra- staff seminars to update the current knowledge. 6.
- 7.
- To establish department library.
  To Clear the NET/ SET/GATE for future research. 8.

## EVALUATIVE REPORT DEPARTMENT OF PHYSICS

1. Name of the department :PHYSICS

#### Vision

To be a centre of excellence in Engineering Physics and Materials Science.

#### **Mission**

- Cultivating an interest towards Science and Technology among engineering students by providing excellent teaching-learning environment in Physics.
- Stimulating the students towards application of concepts and principles of Physics in order to develop Research and Development culture among students.
- 2. Year of Establishment :2007
- 3. Names of Programs / Courses offered (UG, PG,Ph.D.): Supporting department
- 4. Names of Interdisciplinary courses and the departments/units involved: Not Applicable
- 5. **Annual/ semester/choice based credit system (programme wise):** Not Applicable
  - 6. Participation of the department in the courses offered by other departments: Not Applicable
- 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

	Professor	Assoc.Professor	Asst. Professor
Sanctioned	1	Nil	5
Filled	1	Nil	5

10. Faculty profile with name, qualification, designation, specialization:

Name	Qualificat	Designation	Years Experination Specialization			No.of Ph.D. students guided
	ion	8			M	for the last 4 years
Dr.S.John Ethilton	M.Sc., Ph.D.	Prof. & Head	Materials Science	15	6	1
S.Devi Priya	M.Sc., M.Phil.	Asst.Prof.	Laser Physics	9	5	Nil
A.Malathy	M.Sc., M.Phil.	Asst.Prof	Crystallo graphy	5	2	Nil
R. Rajesh	M.Sc., M.Phil.	Asst.Prof	Materials Science	6	5	Nil
V.PrasannaVenkat esh	M.Sc., M.Phil.	Asst.Prof	Nano Materials	4	2	Nil
A.Karthikeyan	M.Sc., M.Tech.	Asst.Prof	Nano Magnetism	1	0	Nil

11. List of senior visiting faculty.Nil

# 12. Percentage of lectures delivered and practical classes handledby temporary faculty:Nil

- 13. Student Teacher Ratio (programme wise): Not Applicable
- 14. Number of academic support staff (technical) and administrative staff; sanctioned and filled:

	Sanctioned	Filled
Academic Support Staff (Technical)	1	0
Academic Support Staff (Non	1	1
Technical)		

15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil/ PG.:

Name of the faculty	<b>Highest Degree</b>	<b>Previous Degree</b>
Dr.S.JohnEhilton	Ph.D.	M.Sc.
S.Devi Priya	M.Phil.	M.Sc.
A.Malathy	M.Phil.	M.Sc.
R.Rajesh	M.Phil.	M.Sc.
V.PrasannaVenkatesh	M.Phil.	M.Sc.
A.Karhtikeyan	M.Tech.	M.Sc.

- 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 totalgrants received:NA
- **18. Research Centre /facility recognized by the University:** Anna University Chennai, 2014-2015

### 19. Publications:

S. N o	Name of faculty	No. of Publica tion	Chap ter in books	Books with ISBN/ISS N no	Citatio n Index	SNIP index	SJR	No. of Publicat ion With impact factor	No. of Publicati on With- index
1	Dr.S.John Ethilton	3	Nil	Nil	2			3	Nil
2	A.Karthikeya n	2	Nil	Nil	Nil	Nil	Nil	2	Nil

- 20. Areas of consultancy and income generated :Nil
- **21. Faculty as members in**a) National committees b) International committees c) EditorialBoards : NIL
- **22. Student projects:** a)Percentage of students who have done in-house projectsincluding interdepartmental/programme Supporing Department
- 23. Awards / Recognitions received by faculty and students: Nil
- 24. List of eminent academicians and scientists / visitors to the department

S. No.	Academicians & Scientists/Visitors	Designation/Organization
	Dr.Manivel raja	Scientist E/ Advanced Magnetics Group
1.		Defence Metallurgical Research Lab
		Defence Research Development Orgn.Hyderabad
2	Dr. V. N. Mani	Scientist E/ Head, Nano Materials Division
2.		Hyderabad
2	Dr. A. Chandra Daga	Asso.Prof /Dept.of Physics, NIT,Trichy
3.	Dr.A.Chandra Bose	NIT, Trichy

# 25. Seminars/ Conferences/Workshops organized & the source of funding

SI.No	Seminars/conferences/workshops	Year	Funding
21.110	organized		Agencies
	National Seminar on "Recent Advances in		
1.	Nano Science & Technology	2008	DST
	(RANST'08)".		
2	A National level seminar on "Smart		DDDO
2.	Device Materials" – DEMATS '11	2011	DRDO

- **26. Student profile programme/course wise:** Supporing Department
- 27. Diversity of Students: Not Applicable
- 28. How many students have cleared national and state competitive examinations suchas NET, SLET, GATE, Civil services, Defense services, etc.? Supporing Department
- 29. Student progression: Not Applicable
- 30. Details of Infrastructural facilities

**Internet facilities for Staff & Students** 

C No	Description of the	Computing facilities Available			
S.No	Room/Laboratory	Server	Computers	Internet	Wi-fi
1.	Physics Lab	Nil	3	Available	Available

- 31. Number of students receiving financial assistance from college, university, Government or other agencies Not Applicable
- 32. Details on student enrichment programmes (special lectures / workshops /Seminar) with external experts

S.No	Name of the programme	External Experts Designation/Organization
	National seminar	Dr.Manivel Raja/Scientist E / Advanced
1.		Magnetics Group
		Defence Metallurgical Research Lab Defence
		Research Development Orgn.Hyderabad
2.		Dr. V. N. Mani/ Scientist E / Head, Nano
۷.		Materials Division, Hyderabad
2		Dr.A.Chandra Bose/Asso.Prof /
3.		Dept.of Physics, NIT, Trichy
4.		Dr.R.Goplala Krishnan /Assistant Prof./
4.		Department of Physics
	Association	Dr.R.V.
5.	inauguration-Guest	Krishnakumar/Asso.Prof./Thiagarajar Art &
	Lecture	Science College, Madurai
	Association	Dr.K.Ramachandran/Emeritus Prof./ Madurai
6.	Valadictory-Guest	Kamaraj University
	Lecture	
	Association	Dr. J. Suresh /
7.	inauguration -Guest	Asso.Prof./The Madura College,Madurai.
	Lecture	

33. Teaching methods adopted to improve student learningthe following for the mode of delivery of courses.

Lecture Method

# 34. Participation in Institutional Social Responsibility (ISR) and Extension activities

Cultural event activity, Literary Event activities, Stationary Distribution, Anti ragging

35. SWOC analysis of the department and Future plans

Strength	Weakness	Opportunities	Challenges
<ul> <li>Fully         Qualified         and         Experienced         Faculty</li> <li>High         percentage         of         University         examination         results</li> <li>Staff         cooperation         in work and         student         development</li> <li>Interest to         learn         advancemen         ts in their         field by         faculty</li> </ul>	Research activities yet to be improved     Grants and funding programs has to be increased	<ul> <li>TheInstitution encourages faculty participation in National andInternational seminars, symposia, conferences, training programmes, works hops etc., toenhance their knowledge and skills, thus making way for consistent growthand innovative practices in education.</li> <li>Sufficient number of reference books, National, International Journals and onlinejournals are available in the central library for pursuing research work</li> <li>Basic facilities are available for research work in areas 1 i k e Materials Science</li> <li>Departments provide opportunities to mold the behavior and character of studentsin various ways</li> <li>Excellent internet facility is available to get in touch with the recent trends</li> </ul>	<ul> <li>Making the transition from schools to college a conducive one for students.</li> <li>Cultivating self-learning</li> </ul>

	invarious fields.	

### **Future Plans:**

- 1. Planned to produce 95% plusresult in all semester.
- 2. Our faculty have planned to publish 4 articles in National and 2 articles in International journals.
- 3. To conduct State level Quiz Competition.
- 4. To conduct the national level symposium for first year students to enrich the knowledge in the area of physics
- 5. To conduct National level conference.
- 6. To establish department library.

## ABBREVIATIONS & ACRONYMS

ACM	Association for Computing Machinery
AICTE	All India Council of Technical Education
BEC	Business English Certificate
BSNL	Bharat Sanchar Nigam Limited
CAT	Common Entrance Test
CGPA	Cumulative Grade Point Average
CII	Confederation of Indian Industry
CIPD	Center for Innovation and Product Development
CO	Course Outcome
CTS	Cognizant Technical Solutions
DRDO	Defense Research and Development Organization
DST	Department of Science & Technology
ENFUSE	Energy and Natural Fuel USErs association
EPF	Employees Provident Fund
FACE	Focus Academy of Career Enhancement
GATE	Graduate Aptitude Test of Engineering
GMAT	Graduate Management Admission Test
GPA	Grade Point Average
GQ	Government Quota
GRE	Graduate Record Examinations
HCL	Hindustan Computers Limited
HoD	Head of Department
HRA	House Rent Allowance
HSC	Higher Secondary Class
ICF	Integral Coach Factory
ICT	Information and Communication Technology
ICTACT	ICT Academy of Tamil Nadu
IEEE	Institute of Electrical and Electronic Engineers
IETE	Institution of Electronics and Telecommunication Engineers
IGCAR	Indira Gandhi Center for Atomic Research
ILL	Inter Library Loan
INFLIBNET	Information and Library Network
IPR	Intellectual Property Right
ISTE	Indian Society of Technical Education
IT	Information technology
IUC	Inter University Center
LAN	Local Area Network
LCD	Liquid Crystal Display
LED	Light emitting Diodes
MKU-LIS	Madurai Kamaraj University – Library Information Service
MNC	MultiNational Companies
MQ	Management Quota
MSME	Ministry of Small and Medium Enterprises

NBA	National Board of Accreditation
NPTEL	National program on Technology Enhanced Learning
NPTEL	National Program on Ttechnology Enhanced Learning
NSS	National Service Scheme
NSS	National Service Scheme
OPAC	Online Public Access Catalogue
OPAC	Online Public Access Catalogue
PEO	Program Educational Objective
PO	Program Outcome
R & D	Research & Development
RO	Reverse Osmosis
RO	Reverse Osmosis
SAE	Society of Automotive Engineers
SALIS	Society for Advancement of Library and Information Science
SERC	Structural Engineering Research Center (CSIR)
SIPCO	State Industries Promotion Corporation of Tamil Nadu
SMART	Science and Mathematics Academy of Real Talents
T.I.M.E	Triumphant Institute of Management Education
TANCET	Tamil Nadu Common Entrance test
TCS	Tata Consultancy Services
TFT LCD	Thin Film Transistor Liquid Crystal Display
TIDCO	Tamil Nadu Industrial Development Corporation Limited
TNPSC	Tamil Nadu Public Service Commission
VCET	Velammal College of Engineering &technology
VET	Velammal Educational Trust
VMCH&RI	Velammal Medical College Hospital & Research Institute
VUE	Visual Understanding Environment



# **Velammal College of Engineering & Technology**

(Approved by AICTE and Affiliated to Anna University, Chennai) Velammal Nagar, Madurai - Rameswaram High Road Viraganoor, Madurai - 625 009.

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### DECLARATION BY THE HEAD OF THE INSITUTION

I certify that the data included in this self-study report (SSR) are true to the best of my knowledge.

This SSR is prepared by the Institution after internal discussions and no part thereof has been outsourced.

I am aware that the Peer team will validate the information provided in this SSR during the peer team visit.

Signature of the Head of the Institution

with seal.

Principal

Valammal College of Engineering and Technology

Madurai - 625 009



