

## Table of Contents

<b>PART-I Institutional Data</b>		
<b>S.No</b>	<b>Title</b>	<b>Page No</b>
<b>1</b>	<b>A. Profile of the College</b>	<b>5</b>
<b>2</b>	<b>B. Criterion-Wise Inputs</b>	<b>9</b>
	I Curricular Aspects	<b>9</b>
	II Teaching – Learning and Evaluation	<b>12</b>
	III Research, Consultancy and Extension	<b>16</b>
	IV Infrastructure and Learning Resources	<b>19</b>
	V Student Support and Progression	<b>25</b>
	VI Governance and Leadership	<b>31</b>
	VII Innovative Practices	<b>34</b>
<b>3</b>	<b>C. Profile Of The Department</b>	<b>37</b>
	i. Mechanical Engineering	<b>37</b>
	ii. Electrical and Electronics Engineering	<b>39</b>
	iii. Electronics and Communication Engineering	<b>41</b>
	iv. Computer Science and Engineering	<b>46</b>
	v. Information Technology	<b>49</b>
	vi. Civil Engineering	<b>52</b>
	vii. Fashion Technology	<b>54</b>
	viii. General Engineering (Mathematics, Science & Humanities of Language)	<b>56</b>
	ix. Master of Business Administration	<b>58</b>
	x. Master of Computer Applications	<b>60</b>

## Table of Content

<b>PART-II: The Evaluative Report</b>		
<b>S.No</b>	<b>Title</b>	<b>Page No</b>
<b>1</b>	<b>A. Executive Summary</b>	<b>62</b>
<b>2</b>	<b>B. Criterion Wise Evaluation Report</b>	<b>80</b>
	I Curricular Aspects	<b>80</b>
	II Teaching–Learning and Evaluation	<b>100</b>
	III Research, Consultancy and Extension	<b>194</b>
	IV Infrastructure And Learning Resources	<b>217</b>
	V Student Support and Progression	<b>244</b>
	VI Governance and Leadership	<b>271</b>
	VII Innovative Practices	<b>295</b>
<b>3</b>	<b>B. Evaluative Report of the Department</b>	<b>311</b>
	i. Mechanical Engineering	<b>311</b>
	ii. Electrical and Electronics Engineering	<b>327</b>
	iii. Electronics and Communication Engineering	<b>347</b>
	iv. Computer Science and Engineering	<b>364</b>
	v. Information Technology	<b>378</b>
	vi. Civil Engineering	<b>394</b>
	vii. Fashion Technology	<b>404</b>
	viii. General Engineering (Mathematics, Science & Humanities of Language)	<b>415</b>
	ix. Master of Business Administration	<b>429</b>
	x. Master of Computer Applications	<b>441</b>
<b>4</b>	<b>D. Declaration by the Head of the Institution</b>	<b>452</b>

<b>5</b>	<b>Enclosures</b>		
	i.	Copy of 2 (f) & 12 (B) Status	<b>453</b> <b>454</b>
	ii.	Master Plan of the College	<b>455</b>
	iii.	Courses Offered	<b>456</b>
	iv.	External Audit Report of the college  (1) ISO 9001:2000 BUREAU VERITAS Report  (2) Anna University of Technology, Coimbatore	<b>457</b>  <b>465</b>



**PART-I**  
**INSTITUTIONAL DATA**

**A. PROFILE OF THE COLLEGE**

**1. Name and address of the College:** Sona College of Technology  
Sona Nagar  
Thiagarajar Polytechnic College  
Road,  
Suramangalam (PO)  
Salem Dt. Tamil Nadu  
Pin Code: 636 005

**2. For Communication : OFFICE**

i. Name of the Principal : Dr. P. Govindarajan  
ii. Area/STD Code : 0427  
iii. Telephone No. : 4099992  
iv. Mobile No. : 9443366495  
Fax No. : 0427-4099888  
E-mail ID : principal@sonatech.ac.in

**For Communication : RESIDENCE**

i. Name of the Principal : Dr. P. Govindarajan  
ii. Area/STD Code : 0427  
iii. Telephone No. : 2466459  
iv. Mobile No. : 9443366495  
Fax No. : -  
E-mail ID : principal@sonatech.ac.in

**3. Funding Status of the College :**

- Government funded
- Grant- in -aid
- Self-financing

**4. Type of Autonomous college**

- a) Affiliated
- Constituent
- College with potential for excellence
- b) by gender
- For Men
- For Women
- For Co-education

**5. a).** Date of establishment of the college : 15.07.1997

(Prior to autonomous status)

**b).** University to which the college is affiliated : Anna University of Technology, Coimbatore

**6. Dates of UGC recognition:**

<b>Under Section</b>	<b>Date, Month &amp; Year (dd-mm-yyyy)</b>	<b>Remarks</b>
<b>i. 2(f)</b>	<b>25.06.2009</b>	
<b>ii. 12(B)</b>	<b>27.08.2010</b>	

(Certificate of recognition u/s 2(f) and 12(B) may be enclosed)

**7. Date of conferment of the autonomous status :** 17.09.2010

**8. Location of the college:** (based on Govt. of India Census)

(Based on Census/GoI criteria)

- Urban
- Semi-urban

Rural

Tribal

Hilly Area

Any other (specify)

**9. Campus area in acres/sq.mts** : 34.5 acres / 139898 Sq. m.

**10. Unit Cost of Education** :

(a) Total annual expenditure divided by the number of students

(Including the salary component)

Recurring	- 58,700
Non- Recurring	- 28,800
<b>Total</b>	<b>- 87,500</b>

(b) Total annual expenditure divided by

Recurring	- 33,400
Non- Recurring	- 28,600
<b>Total</b>	<b>- 62,000</b>

(Excluding the salary component)

**11. Current number of academic programmes / courses offered by the college under the following categories:**

(Enclose the list of academic programmes offered)

<b>Programmes</b>	<b>Number</b>
UG	<b>7</b>
PG	<b>10</b>
Certificate course	
Diploma	
PG Diploma	
M. Phil.	
Ph.D.	
Any other (specify)	
<b>Total</b>	<b>17</b>

**12. Number of permanent and temporary members of the teaching staff:**

	Female	Male	Total
<b>Permanent teachers (Total)</b>	<b>129</b>	<b>155</b>	<b>284</b>
Number of teachers with Ph.D. as the highest qualification	12	23	35
Number of teachers with M.Phil. as the highest qualification	35	18	53
Number of teachers with PG as the highest qualification	79	107	186
Number of teachers with UG qualification	3	7	10
<b>Temporary teachers (Total)</b>	<b>Not Applicable</b>		
Number of teachers with Ph.D. as the highest qualification			
Number of teachers with M.Phil. as the highest qualification			
Number of teachers with PG as the highest qualification			
<b>Part-time teachers (Total)</b>			
Part-time teachers with Ph.D. as the highest qualification			
Part-time teachers with M.Phil. as the highest qualification			
Part-time teachers with PG as the highest qualification			

**13. Furnish data about the number of students enrolled in the institution, for the current year:**

	UG		PG		Total
	Profes sional	Non- Professional	Profession al	Non- Professional	
Students from the same state where the university is located	3360	-	901	-	4261
Students from other states of India	21	-	8	-	29
NRI students	-	-	-	-	-
Other overseas students	171	-	29	-	200
<b>Grand Total</b>	<b>3552</b>		<b>938</b>	-	<b>4490</b>



	M. Phil	Ph. D	Diploma	Certificate
Number of students from the same State where the college is located	<b>Not Applicable</b>			
Number of students from other States				
Number of NRI students				
Number of overseas students				

## B) CRITERION-WISE INPUTS

### Criterion I: Curricular Aspects

1. Number of Programmes offered :

- Certificate
- Diploma
- UG
- PG
- Research

2 Number of Subject taught at the institution

17

3 Number of overseas programmes on campus and income earned

NO.	Amount	Agency
<b>NO</b>		

4 Does the college offer self-funded programmes?

Yes	<input checked="" type="checkbox"/>	NO	
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If, Yes, how many?

17

5 Programmes with annual system

Yes		NO	<input checked="" type="checkbox"/>	Number	-
-----	--	----	-------------------------------------	--------	---

6 Programmes with semester system

Yes	<input checked="" type="checkbox"/>	NO		Number	<b>16</b>
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7	Programmes with trimester system	Yes	<input checked="" type="checkbox"/>	NO		Number	<b>1</b>
8	Programmes with choice based credit system	Yes		NO	<input checked="" type="checkbox"/>	Number	-
9	Programmes with elective options	Yes	<input checked="" type="checkbox"/>	NO		Number	<b>17</b>
10	Courses offered in modular form	Yes		NO	<input checked="" type="checkbox"/>	Number	
11	Inter/multidisciplinary Programmes	Yes		NO	<input checked="" type="checkbox"/>	Number	
12	Courses with ICT-enabled teaching-learning process	Yes	<input checked="" type="checkbox"/>	NO		Number	<b>113</b>
13	Courses for which where assessment of teachers by students has been introduced	Yes	<input checked="" type="checkbox"/>	NO		Number	<b>17</b>
14	Programmes with faculty exchange/visiting faculty	Yes	<input checked="" type="checkbox"/>	NO		Number	<b>01</b>
15	New Programmes (UG and PG) introduced during the last three years	Yes		NO	<input checked="" type="checkbox"/>	Number	
16	Has major syllabus revision done during the last five years?	Yes	<input checked="" type="checkbox"/>	NO		Number	<b>NA</b> Revision by Anna University

If Yes, specify the number?

The academic year 2010-2011, revised 1 time

17	Compulsory internships (UGC or other vocational programmes)	Yes	<input checked="" type="checkbox"/>	NO		Number	<b>07</b>
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18	Value added courses	Yes	<input checked="" type="checkbox"/>	NO		Number	<b>60</b>
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19	Feedback on curriculum Employers	Yes	<input checked="" type="checkbox"/>	NO		Number	<b>37</b>
	Obtained from Students	Yes	<input checked="" type="checkbox"/>	NO		Number	<b>347</b>
	Parents	Yes	<input checked="" type="checkbox"/>	NO		Number	<b>10</b>
	Alumni	Yes	<input checked="" type="checkbox"/>	NO		Number	<b>30</b>
	Academic Peers	Yes	<input checked="" type="checkbox"/>	NO		Number	<b>26</b>

20	Number of Job Oriented Courses	Yes	<input checked="" type="checkbox"/>	NO		Number	<b>17</b>
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21	Courses in emerging areas	Yes	<input checked="" type="checkbox"/>	NO		Number	<b>17</b>
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22	Is there a practice of course evaluation	Yes	<input checked="" type="checkbox"/>	NO		Number	<b>5</b>
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23	Programmes with twinning arrangements / international collaborations	Yes	<input checked="" type="checkbox"/>	NO		Number	<b>1</b>
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24	Any other (Specify)						
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**Criterion II : Teaching – Learning and Evaluation**

1	Process of admission to various programmes	Student various	Entrance Test	Yes		NO	<input checked="" type="checkbox"/>	Number of Programmes	
			Interview	As per Guidelines of Tamil Nadu Government					
			Previous Academic Record						
			Any other (Specify)						

2	Number of working days during the academic year	<b>210</b>
---	---	------------

3	Number of teaching days during the last academic year	<b>190</b>
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4	Number of Position sanctioned and filled as on date	<b>Sanctioned</b>	<b>Filled</b>	
		Teaching	<b>264</b>	<b>284</b>
		Non-Teaching	<b>-</b>	<b>188</b>
		Technical	<b>-</b>	<b>82</b>

5 a. Number of regular and permanent teachers (gender-wise)

Professor	<b>M</b>	28	<b>F</b>	8
Readers	<b>M</b>	33	<b>F</b>	31
Sr. Grade Lecturers	<b>M</b>	20	<b>F</b>	23
Lecturers	<b>M</b>	74	<b>F</b>	67

b. Number of temporary teachers (gender-wise)

Lecturers – Full-Time	<b>M</b>	-	<b>F</b>	-
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Lecturers – Part-Time	<b>M</b>	-	<b>F</b>	-
Lecturers (Management appointment) – Full-Time	<b>M</b>	-	<b>F</b>	-
Lecturers (Management appointment) – Part-Time	<b>M</b>	-	<b>F</b>	-
Any other (Specify)	<b>M</b>	-	<b>F</b>	-
<b>Total</b>	<b>M</b>	-	<b>F</b>	-

c. Number of teachers belonging to

Same State	<b>278</b>
Other States	<b>06</b>
Overseas	<b>NIL</b>

6	a. Number of Permanent teachers qualified and its percentage of the total faculty strength	<b>No.</b>	<b>284</b>	<b>%</b>	<b>100</b>
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b. Teacher : Student ratio	<b>1 : 14</b>
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c. Number and percentage of teachers who have Ph.D. as the highest qualification	<b>No.</b>	<b>35</b>	<b>%</b>	<b>12.3</b>
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d. Number and percentage of teachers who have M. Phill as the highest qualification	<b>No.</b>	<b>53</b>	<b>%</b>	<b>18.7</b>
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e. Number and percentage of teachers who have completed UGC, NET and SLET exams	<b>No.</b>	<b>4</b>	<b>%</b>	<b>12.5</b>
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f. Number and percentage of teachers who have served as resource persons in Workshops/Seminars/Conferences, during the last five years?

<b>No.</b>	<b>65</b>	<b>%</b>	<b>22</b>
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g. Number of faculty development programmes availed of by teachers during the last five years

Refresher:  
Orientation:  
UGC/FIP  
Any other (FDP, Conference)

	<b>Year</b>				
	<b>05-06</b>	<b>06-07</b>	<b>07-08</b>	<b>08-09</b>	<b>09-10</b>
Refresher:	30	52	55	31	31
Orientation:	18	21	23	30	18
UGC/FIP	4	5	6	13	4
Any other (FDP, Conference)	85	81	105	97	111

h. Number of faculty development programmes organized by the college

Seminar/Workshops/Symposia on Curricular development, teaching-learning, assessment and so on  
Research development programmes  
Invited/endowment lecturers  
Any other (MDP)

	<b>Year</b>				
	<b>05-06</b>	<b>06-07</b>	<b>07-08</b>	<b>08-09</b>	<b>09-10</b>
Seminar/Workshops/Symposia on Curricular development, teaching-learning, assessment and so on	47	52	47	47	51
Research development programmes	1	5	7	11	14
Invited/endowment lecturers	6	7	6	5	6
Any other (MDP)	7	13	3	5	2

7 Number and Percentage of the courses where 'predominantly' lecture method is used

<b>No</b>	<b>17</b>	<b>%</b>	<b>100</b>
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8. Does the college have the tutor-ward system?

If yes, how many students are under the care of a teacher?

Yes	<input checked="" type="checkbox"/>	No		Number	<b>284</b>
<b>15</b>					

9. Remedial programmes offered

Yes	<input checked="" type="checkbox"/>	No		Number	<b>05</b>
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10. Bridge courses offered

Yes	<input checked="" type="checkbox"/>	No		Number	<b>17</b>
-----	-------------------------------------	----	--	--------	-----------

11. Is there a mechanism for:

a. Self appraisal of faculty

Yes	<input checked="" type="checkbox"/>	No	
-----	-------------------------------------	----	--

b. Student assessment of faculty performance

Yes	<input checked="" type="checkbox"/>	No	
-----	-------------------------------------	----	--

c. Assessment of faculty performance by experts

Yes	<input checked="" type="checkbox"/>	No	
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12 Do the faculty members perform additional administrative work?

Yes	<input checked="" type="checkbox"/>	No	
-----	-------------------------------------	----	--

If yes, the average number of hours spent per week by the faculty

05
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13. Any other (Specify)

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### Criterion III: Research, Consultancy and Extension

1. Number and Percentage of faculty members actively involved in research guidance and projects

Yes	<input checked="" type="checkbox"/>	No		Number	<b>185</b>
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2. Are there any Research collaborations?

National

Yes  No

If yes, how many?

31
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Overseas

Yes  No

If yes, how many?

07
----

3. Total Amount and Percentage of the annual budget allocated for promotion of research

Amount	196.10	%	2.27%
	Lakhs		

(during the last five years)

4. a. Do the faculty members have research projects? (on going/completed) If yes, how many?

Yes  No

Ongoing

68
61

Completed

b. Provide the following details about the on going research projects (Last 5 Years)

Major projects	Yes	<input checked="" type="checkbox"/>	No		Number	14	Agency	AICTE DST ISRO	Amount	143.1 LAKHS
Minor projects	Yes	<input checked="" type="checkbox"/>	No		Number	04	Agency	AICTE	Amount	17 LAKHS
College procured Projects	Yes	<input checked="" type="checkbox"/>	No		Number	05	Amount	34.27 LAKHS		



Industry sponsored	Yes	<input checked="" type="checkbox"/>	No		Number	03	Industry		Amount	30.62
Any other (specify)										
Number of student research projects	Yes	<input checked="" type="checkbox"/>	No		Number.	03	Amount sanctioned by the College	Amount sanctioned by other agencies		
							2 LAKHS	.75 LAKHS		

5. Research publications:

In International journals	Yes	<input checked="" type="checkbox"/>	No		Number	<b>171</b>
In National journals – refereed papers	Yes	<input checked="" type="checkbox"/>	No		Number	<b>101</b>
In College journal	Yes	<input checked="" type="checkbox"/>	No		Number	<b>05</b>
Books	Yes	<input checked="" type="checkbox"/>	No		Number	<b>18</b>
Abstracts	Yes	<input checked="" type="checkbox"/>	No		Number	<b>272</b>
Any other (specify)	Yes		No		Number	
Mean Impact Factor of the research journals in which publications were made during the last 5 years <b>1.25</b>						
Research Awards, recognition, patents etc. during the last five years, if any (specify)	Number of					
	Research awards : <b>04</b>					
	Patents : <b>07</b>					
	Research centre : <b>12</b>					
	(recognized by Anna University)					

6. Has the faculty presented research papers in academic forums Yes  No

If yes, number of papers presented at

National seminars

**538**

International seminars

**336**

Any other (specify)

- 7 Average citation index of publication of faculty 

<b>1.25</b>
-------------
- 8 Number of other extra curricular/co-curricular activities organized in collaboration with other agencies/NGOs (such as Rotary Lions etc.) on Campus 

<b>15</b>
-----------
- 9 Extension Centre: 

Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	Year of Establishment	<b>1999</b>
-----	-------------------------------------	----	--------------------------	-----------------------	-------------
- 10 Number of regular extension programmes organized by NSS, NCC etc., (average of last five years) 

NSS	<b>30</b>
NCC	<b>45</b>
- 11 Number of NCC cadets/Units 

<b>M</b>	50	<b>F</b>	50
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<b>Units</b>	2
--------------	---
- 12 Number of NSS Volunteers/Units 

<b>M</b>	163	<b>F</b>	116
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<b>Units</b>	3
--------------	---
- 13 Number of faculty engaged in consultancy 

<b>48</b>
-----------
- 14 Consultancy earnings per annum (give average of last five years) 

<b>19.74</b>
--------------
- 15 Any other, Please specify 

<b>123 Lakhs</b>
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( Testing\ Jobwork\ Non-Formal Continuing Education\ Vocational Training )

### Criterion IV: Infrastructure and Learning Resources

1	Campus area in acres	<b>34.50</b>																														
	Built-up area in sq.mts./sq.ft.	<b>61327</b>																														
	<b>* 1 sq.ft. = 0.093 sq.mt.</b>																															
2	Working hours of the Library																															
	On working days	<b>8.00 AM to 8.00 PM</b>																														
	On holidays	<b>10.00 AM to 5.00 PM</b>																														
	On Examination days	<b>8.00 AM to 8.00 PM</b>																														
3	Average number of faculty visiting the library/day	<b>20 – 30</b>																														
4	Average number of students visiting the library/day	<b>170 – 180</b>																														
5	Open access:	<table border="1"> <tr> <td>Yes</td> <td><input checked="" type="checkbox"/></td> <td>No</td> <td><input type="checkbox"/></td> </tr> </table>	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>																										
Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>																													
6	Total Collections (Numbers)	<table border="1"> <thead> <tr> <th></th> <th><b>Titles</b></th> <th><b>Volumes</b></th> </tr> </thead> <tbody> <tr> <td>a. Books</td> <td>4697</td> <td>6490</td> </tr> <tr> <td>b. Text books</td> <td>12182</td> <td>50911</td> </tr> <tr> <td>c. Reference books</td> <td>2462</td> <td>2731</td> </tr> <tr> <td>d. Magazines</td> <td>50</td> <td></td> </tr> <tr> <td>e. Current Journals</td> <td></td> <td></td> </tr> <tr> <td>    Indian Journals</td> <td></td> <td><b>128</b></td> </tr> <tr> <td>    Foreign Journals</td> <td></td> <td><b>110</b></td> </tr> <tr> <td>f. Peer Reviewed of Journals</td> <td></td> <td><b>170</b></td> </tr> <tr> <td>g. Back Volume of Journals</td> <td></td> <td><b>1983</b></td> </tr> </tbody> </table>		<b>Titles</b>	<b>Volumes</b>	a. Books	4697	6490	b. Text books	12182	50911	c. Reference books	2462	2731	d. Magazines	50		e. Current Journals			Indian Journals		<b>128</b>	Foreign Journals		<b>110</b>	f. Peer Reviewed of Journals		<b>170</b>	g. Back Volume of Journals		<b>1983</b>
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g. Back Volume of Journals		<b>1983</b>																														

h. E-resources

CDs/DVDs	2255
Database	CMIE Progress
Online Journals	IEL; ACM & ASME
Other AV resources	NPTEL Courses

i. Special collections

UNO Repository Centre	
World Bank Repository	
Materials acquired under special schemes (IEEE, ACM, NBHM, DST etc.,)	INDEST
Competitive examinations	YES
Book Bank	YES
Braille materials	
Manuscripts	
Any other (specify)	NPTEL

7 Number of books/journals/periodicals added during the last five years and their cost

Library Resources	The year before last		The year before	
	Number	Total Cost (Rs.)	Number	Total Cost (Rs.)
Text books	2400	7,33,806	2160	6,89,991
Reference s	309 (26)	2,57,823	283 (31)	3,09,996
Journ/Periodic	268	3,13,444	280	9,65,000
Any other, specify	Online journals: IEL, ACM & ASME Digital Library			

8 Furnish the following details

Total carpet area of the Central Library (in Sq.ft.)

825.26

Seating capacity of the Central Library

220

Separate reading room facility for

- Students
- Staff

Number of departmental libraries

Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
<b>17</b>			

9 Is the Central Library automated?

If yes, is it

- Yes
- Partially Yes
- No

<input checked="" type="checkbox"/>	
<input type="checkbox"/>	
<input type="checkbox"/>	

10 Name the automation software used  
Percentage of annual allocation of funds

<b>AUTOLIB</b>
<b>1.05%</b>

11 Services/facilities in the library

Circulation of books and journal	<input checked="" type="checkbox"/>
Display of current events/information	<input checked="" type="checkbox"/>
Bibliographic compilation	<input checked="" type="checkbox"/>
Reference	<input checked="" type="checkbox"/>
Reprography	<input checked="" type="checkbox"/>
Computer and Printing	<input checked="" type="checkbox"/>
Internet	<input checked="" type="checkbox"/>
Digitalization	<input checked="" type="checkbox"/>
Inter-library loan	<input checked="" type="checkbox"/>
Uninterrupted power supply/back up	<input checked="" type="checkbox"/>
User orientation / information literacy	<input checked="" type="checkbox"/>
Inflibnet / Delnet	<input checked="" type="checkbox"/>

Any other. Please specify

<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>

12 Are students allowed to retain books for Examinations?

Yes	<input checked="" type="checkbox"/>	No	
-----	-------------------------------------	----	--

13 Furnish the information about the following library services:

Average number of books issued/returned per day

**55 – 60**

Average number of users who visited/consulted per month

**3800 – 4000**

Ratio of library books to the number of students enrolled

**14 / student**

Total number of days the library is kept open

**345**

14 Total number of computer terminals  
Number of Departments with computer  
Budget allotment for computers during the  
Amount spent on maintenance and  
Type of Internet facility:

**1750**

**17**

**1.11 lakhs**

**20 lakhs**

Dialup

Base line

Broadband

Any other  
(specify)

**Leased Line**

Number of terminals with Internet facility available to students

**850**

Teachers

**200**

Non – Teaching Staff

**100**

Institutional networking through Optical Fiber connectivity

Yes	<input checked="" type="checkbox"/>	No	
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Wifi connectivity	Yes	<input checked="" type="checkbox"/>	No	
Any other (specify)				

15	Is there a workshop / Instrumentation Centre?	Yes	<input checked="" type="checkbox"/>	No		Year of Establishment	<b>1997</b>
----	---	-----	-------------------------------------	----	--	-----------------------	-------------

16	Is there a Health Centre?	Yes	<input checked="" type="checkbox"/>	No		Year of Establishment	<b>2000</b>
----	---------------------------	-----	-------------------------------------	----	--	-----------------------	-------------

17 Is there Residential accommodation provided for

Faculty	Yes	<input checked="" type="checkbox"/>	No		% of staff accommodated	<b>10%</b>
Non – Teaching Staff	Yes	<input checked="" type="checkbox"/>	No		% of staff accommodated	<b>2%</b>

18	Are there Hostels for students?	Yes	<input checked="" type="checkbox"/>	No	
----	---------------------------------	-----	-------------------------------------	----	--

If yes, number of students residing in hotels	<b>1650</b>
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Male	Yes	<input checked="" type="checkbox"/>	No		Number	<b>800</b>
Female	Yes	<input checked="" type="checkbox"/>	No		Number	<b>850</b>

19 Is there a provision for

(a) Sports fields	Yes	<input checked="" type="checkbox"/>	No		Number	<b>19</b>		
(b) Gymnasium					Yes	<input checked="" type="checkbox"/>	No	<b>1</b>
(c) Womens' rest rooms	Yes	<input checked="" type="checkbox"/>	No		Number	<b>03</b>		
(d) Transport					Yes	<input checked="" type="checkbox"/>	No	
(e) Canteen / Cafeteria	Yes	<input checked="" type="checkbox"/>	No		Year of Establishment	<b>1997</b>		

(f) Students' centre	Yes	<input checked="" type="checkbox"/>	No		Year of Establishment	<b>1997</b>
(g) Media centre	Yes	<input checked="" type="checkbox"/>	No		Year of Establishment	<b>2000</b>
(h) Telephone facility (Local/STD)	Yes	<input checked="" type="checkbox"/>	No		Year of Establishment	<b>1997</b>
(i) Generator / Electricity Backup	Yes	<input checked="" type="checkbox"/>	No		Year of Establishment	<b>1997</b>

20 Is there provision for Audio Visual Equipment/teaching aids:

LCD projectors	Yes	<input checked="" type="checkbox"/>	No		Number	<b>58</b>
OHP	Yes	<input checked="" type="checkbox"/>	No		Number	<b>34</b>
Slide projectors	Yes		No	<input checked="" type="checkbox"/>	Number	<b>-</b>
TV/VCP/Cable connection	Yes	<input checked="" type="checkbox"/>	No		Number	<b>1</b>
DVD players	Yes	<input checked="" type="checkbox"/>	No		Number	<b>10</b>

21 Does the institution make use of Edu sat/V sat facility

Yes	<input checked="" type="checkbox"/>	No	
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22 Is there provision for Indoor sports facilities

Yes	<input checked="" type="checkbox"/>	No		Year of Establishment	<b>1997</b>
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23 Any other (specify)

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## 5. Criterion V: Student Support and Progression

### 1. a Student Strength

(Provide information in the following format for the last 5 years)

**2006-07**

Student Enrolment	UG			PG		
	M	F	T	M	F	T
No. of students from the same state where the college is located	1537	936	<b>2473</b>	408	241	<b>649</b>
No. of students from other States	11	4	<b>15</b>	13	7	<b>20</b>
No. of NRI students	-	-	-	-	-	-
No. of overseas students	77	15	<b>92</b>	5	4	<b>9</b>

**2007-08**

Student Enrolment	UG			PG		
	M	F	T	M	F	T
No. of students from the same state where the college is located	1644	1041	<b>2685</b>	362	281	<b>643</b>
No. of students from other States	13	3	<b>16</b>	11	3	<b>14</b>
No. of NRI students	-	-	-	-	-	-
No. of overseas students	112	18	<b>130</b>	8	4	<b>12</b>

**2008-09**

<b>Student Enrolment</b>	<b>UG</b>			<b>PG</b>		
	<b>M</b>	<b>F</b>	<b>T</b>	<b>M</b>	<b>F</b>	<b>T</b>
No. of students from the same state where the college is located	1786	1222	<b>3008</b>	439	360	<b>799</b>
No. of students from other States	15	5	<b>20</b>	3	1	<b>4</b>
No. of NRI students	-	-	-	-	-	-
No. of overseas students	126	26	<b>152</b>	14	0	<b>14</b>

**2009-10**

<b>Student Enrolment</b>	<b>UG</b>			<b>PG</b>		
	<b>M</b>	<b>F</b>	<b>T</b>	<b>M</b>	<b>F</b>	<b>T</b>
No. of students from the same state where the college is located	1800	1098	<b>2898</b>	515	394	<b>909</b>
No. of students from other States	16	5	<b>21</b>	4	1	<b>5</b>
No. of NRI students	-	-	-	-	-	-
No. of overseas students	124	21	<b>145</b>	20	4	<b>24</b>

**2010-11**

<b>Student Enrolment</b>	<b>UG</b>			<b>PG</b>		
	<b>M</b>	<b>F</b>	<b>T</b>	<b>M</b>	<b>F</b>	<b>T</b>
No. of students from the same state where the college is located	1871	1482	<b>3353</b>	382	315	<b>697</b>
No. of students from other States	15	9	<b>24</b>	12	18	<b>30</b>
No. of NRI students	-	-	-	-	-	-
No. of overseas students	140	29	<b>169</b>	7	4	<b>11</b>

**M – Male, F-Female, T-Total**

b. Dropout rate of UG and PG students of the last two batches

<b>UG</b>	<b>PG</b>
<b>12</b>	<b>11</b>

c. Dropout rate during the different years after admission

<b>UG</b>		
<b>1</b>	<b>2008</b>	<b>05</b>
<b>2</b>	<b>2009</b>	<b>03</b>
<b>3</b>	<b>2010</b>	<b>04</b>
<b>PG</b>		
<b>1</b>	<b>2009</b>	<b>05</b>
<b>2</b>	<b>2010</b>	<b>06</b>

2 Student Freeships and scholarships:(last year' data)

Endowments:

Freeships:

Scholarships (Government)

Scholarships (Institution)

Loan facilities

<b>Number</b>	<b>Amount (Rs.)</b>
<b>144</b>	<b>53,60,000</b>
<b>1092</b>	<b>55,36,000</b>
<b>236</b>	<b>12,79,000</b>
<b>220</b>	<b>3.10 crores</b>

Any other student financial support schemes (specify)

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3 Does the college obtain feedback from students on their campus experience? Is the feedback analyzed?

Yes	<input checked="" type="checkbox"/>	No	
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4 Major College cultural Events organized by the college during the last year

	Organized			Participated		
	Yes	No	Number	Yes	No	Number
Inter-collegiate	<b>Yes</b>		<b>1</b>	<b>Yes</b>		<b>113</b>
Inter-university						
National	<b>Yes</b>		<b>09</b>	<b>Yes</b>		<b>1960</b>
Any other (specify)						

5 Examination Results (data of past five years)

Student Performance	UG					PG					M. Phil.				
	05-06	06-07	07-08	08-09	09-10	05-06	06-07	07-08	08-09	09-10	05-06	06-07	07-08	08-09	09-10
	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
Pass Percentage	83	87	89	94	95	83	88	94	96	96					
Number of first classes	202	280	263	418	344	116	161	190	135	181					
Number of distinctions	157	140	196	303	389	42	77	96	64	89					

6 Number of students who have passed the following examinations during the last five years

NET	01	01			
SLET	03				
CAT	10	02	04	04	06
TOEFL	04	02	03	03	02
GRE					
G-MAT					
IAS					
Defense Entrance					
Other services	100	63	40	53	65
Any other (specify)					

7 Is there a student counseling centre?

Yes	<input checked="" type="checkbox"/>	No		Year of Establishment	1997
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8	Is there a Grievance Redressal Cell?	Yes	<input checked="" type="checkbox"/>	No		Year of Establishment	<b>1997</b>
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9	Does the college have an Alumni Association	Yes	<input checked="" type="checkbox"/>	No		Year of Establishment	<b>1997</b>
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10	Parent – Teacher Association	Yes		No	<input checked="" type="checkbox"/>	Year of Establishment	
----	------------------------------	-----	--	----	-------------------------------------	-----------------------	--

11	Students’ Group Insurance Scheme	Yes	<input checked="" type="checkbox"/>	No			
----	----------------------------------	-----	-------------------------------------	----	--	--	--

12	Number of students supported by college funds	<b>374</b>					
----	---	------------	--	--	--	--	--

13	Complaints Cell for preventing sexual harassment of women	Yes	<input checked="" type="checkbox"/>	No			
----	---	-----	-------------------------------------	----	--	--	--

14	Number of students using the book bank facility	<b>200</b>					
----	---	------------	--	--	--	--	--

15	Number of students opting for further studies	<b>10 %</b>					
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16	Career counseling	<b>Yes</b>					
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17	Placement Cell	<b>Yes</b>					
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18	Single window admission for foreign students	<b>No</b>					
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19	Any other (specify)						
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## Criterion VI: Governance and Leadership

1 a. Number of Teaching Staff	Permanent	<b>M</b>	<b>155</b>	<b>F</b>	<b>129</b>
	Temporary	<b>M</b>	-	<b>F</b>	-

b. Number of Non-Teaching Staff	Permanent	<b>M</b>	<b>137</b>	<b>F</b>	<b>51</b>
	Temporary	<b>M</b>	-	<b>F</b>	-

c. Number of Technical Assistants	Permanent	<b>M</b>	<b>74</b>	<b>F</b>	<b>8</b>
	Temporary	<b>M</b>	-	<b>F</b>	-

d. Technical / Non-Teaching staff ratio	<b>1 : 1 : 1</b>			
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2 Number of management appointees	Teaching Staff	<b>M</b>	<b>153</b>	<b>F</b>	<b>129</b>
	Non-Teaching Staff	<b>M</b>	<b>137</b>	<b>F</b>	<b>51</b>
	Technical Assistants	<b>M</b>	<b>74</b>	<b>F</b>	<b>08</b>

3 Percentage of posts filled under reserved categories: a. Teaching	SC/ST	<b>19</b>
	OBC	<b>190</b>
	NT	
	General	<b>75</b>
	Any other (specify)	

b.	Non – Teaching	SC/ST	<b>27</b>
		OBC	<b>188</b>
		NT	
		General	<b>55</b>
		Any other	

4 Number of Professional development programmes held for non-teaching **10**

5 Financial resources for the college (approximate amounts) – Last year's data

Grant-in-aid	<b>72.45 Lakhs</b>
Fees	
Donation	
Self-funded courses – Fee	<b>1995.68 Lakhs</b>
Any other (specify)	

6 Finance – last two years data

Expenditure (in percentages of the total annual budget)	Year	
	Before last	Last year
	2008-09	2009-10
Spent on the salaries of faculty	<b>33.96%</b>	<b>33.55%</b>
Spent on the salaries of non-teaching employees	<b>10.57%</b>	<b>10.65%</b>
Spent on books and journals	<b>0.92%</b>	<b>0.88%</b>
Spent on Building development	<b>24.32%</b>	<b>27.78%</b>
Spent on maintenance, electricity, water, sports, examinations, hostels, student amenities, etc.,	<b>10.04%</b>	<b>8.12%</b>
Spent on academic activities of departments, laboratories, green house, animal house, etc.,	<b>6.72%</b>	<b>6.09%</b>
Spent on equipment, research, teaching aids, seminars, etc.,	<b>11.65%</b>	<b>11.48%</b>
Spent on contingency / miscellaneous expenditure	<b>0.96%</b>	<b>1.98%</b>



7 Number of meetings of Academic and Administrative Bodies:

Governing Body		One / Year
Internal Admin. Bodies (mention only three most important bodies)	1	<b>Managing Council</b>
	2	<b>Finance Committee</b>
	3	<b>Planning &amp; Evaluation</b>
Any other (specify)		

8 Are there Welfare Schemes for the academic community (average of past 5 years)

Loan facility	Yes	<input checked="" type="checkbox"/>	No		Amount	<b>2 Lakhs</b>
Medical Group Insurance	Yes	<input checked="" type="checkbox"/>	No		Amount	<b>50,000</b>
Any other						

9 Is there ICT – support for the following

Office	Yes	<input checked="" type="checkbox"/>	No	
Student Admission	Yes	<input checked="" type="checkbox"/>	No	
Student Records	Yes	<input checked="" type="checkbox"/>	No	
Career Counseling	Yes	<input checked="" type="checkbox"/>	No	
Student Placement	Yes	<input checked="" type="checkbox"/>	No	
Aptitude Testing	Yes	<input checked="" type="checkbox"/>	No	
Examinations	Yes		No	<input checked="" type="checkbox"/>
Finance	Yes		No	<input checked="" type="checkbox"/>
10 Any other (specify)				

### Criterion VII: Innovative Practices

1. Does the college have an Internal Quality Assurance mechanism

Yes	<input checked="" type="checkbox"/>	No	
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2 Does the college have a centre for Womens' Studies?

Yes		No	<input checked="" type="checkbox"/>
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If yes, provide the following details about the activities of the centre

(Average of last two years)

Academic Programmes

Yes		No	<input checked="" type="checkbox"/>	Number	
Yes		No	<input checked="" type="checkbox"/>	Number	
Yes		No	<input checked="" type="checkbox"/>	Number	

Projects

Exchange (Visiting/training, national and international)

Any other (specify)

--

3 Do students participates in the quality Enhancement of the Institution

Yes	<input checked="" type="checkbox"/>	No	
-----	-------------------------------------	----	--

4 What is the number and percentage of the students in the institution? (for the current year)

	Number	%
SC	447	9.95
ST	12	.26
OBC	4006	89
Women	1995	44
Differently-abled	20	.44
Rural	898	20
Tribal	12	.26

5 . What is the average percentage of the following category of staff?

<b>Category</b>	<b>Teaching</b>	<b>%</b>	<b>Non-Teaching</b>	<b>%</b>
SC	18	6.3	27	10
ST	1	0.4	-	-
OBC	190	66.9	188	69.6
Women	129	45.4	59	21.9
Differently-abled	1	0.4	-	-
Rural	42	14.8	29	10.7
Tribal	-	-	-	-

6 What is the percentage incremental academic growth in terms of aggregate marks of the following category of students for the last two batches?

<b>Category</b>	<b>At Admission</b>		<b>On Completion of the course</b>	
	<b>Batch I (2010-2011)</b>	<b>Batch II (2010-2011)</b>	<b>Batch I</b>	<b>Batch II</b>
SC	<b>236.75</b>	<b>189.83</b>	<b>241.5</b>	<b>234.5</b>
ST	<b>152</b>	<b>167.75</b>	<b>152.9</b>	<b>167.5</b>
OC+OBC	<b>196.50+240.50</b>	<b>199+197.50</b>	<b>267.67</b>	<b>265.56</b>
Women	<b>238.50</b>	<b>199</b>	<b>268.8</b>	<b>265.56</b>
Differently-abled	<b>240.50</b>	<b>171</b>	<b>NA</b>	<b>NA</b>
Rural	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>
Tribal	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>

7 Is there a mechanism for obtaining stakeholder perception about the institution?

Yes	<input checked="" type="checkbox"/>	No	
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8 Has the institution kept a record of students shouldering social responsibilities in addition to their academic activities?

Yes	<input checked="" type="checkbox"/>	No	
-----	-------------------------------------	----	--

9 Does the institution have a mechanism for analyzing student feedback on institutional performance, to arrive at student satisfaction Index? (Refer t the sample questionnaires annexed)

Yes	<input checked="" type="checkbox"/>	No	
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10 Any other (specify)

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### C. Profile of the Department

1.	Name of the Department	<b>Mechanical Engineering</b>		
2.	Year of Establishment	1997		
3.	Courses / Programmes and subject combinations offered	Programme	Subject	
		B.E – Mechanical Engineering	Physical Science Humanity and Languages Mathematics Computer Science Basic Engineering Core Subject Theory Laboratory Projects	
		M.E – Engineering Design	Mathematics Core Subject Theory Laboratory Projects	
		M.E – Product Design & Development	Core Subject Theory Laboratory Projects	
4.	Number of Teaching posts sanctioned and filled	30-33		
5.	Number of Administrative Staff	2		
6.	Number of Technical staff	24		
7.	Number of Students (Men/Women) Give details course – wise	Course	Men	Women
		B.E	439	2
		M.E	64	2
8.	Ratio of Teacher to Students (for sanctioned intake)	1:14		
9.	Ratio of to Teacher to Research Scholars	33:16		
10.	Number of research scholars who have obtained their master’s degree from other institutions	11		
11.	Number of Teachers in academic bodies of other Autonomous Colleges and Universities	1		
12.	Latest revision of the curriculum (year)	2010		
13.	Number of students passed in NET/SLET etc. (last 5 years)	110		
14.	Success Rate of students	94%		

15.	Demand Ratio (No. of seats: No. of application )	Students are admitted state level ranking by the Government of Tamil Nadu	
16.	Awards and recognition received by faculty (last 5 years)	1. Dr.R.M.Arunachalam Fast Track proposal for YOUNG SCIENTISTS 2. Dr.R.M.Arunachalam Career Award for Young Teachers	
17.	Faculty who have attended Natl. Intl. Seminars (last 5 years)	89	
18.	Number of national/international seminars organized (last 5 years)	7	
19.	Number of teacher engaged in consultancy and the revenue generated	<b>No. of Teachers</b>	<b>Revenue generated</b>
		6	Rs.2.2 lakhs
20.	Number of Ongoing projects and their total outlay	<b>Ongoing Projects</b>	<b>Total outlay</b>
		1	Rs.10.5 lakhs
21.	Research projects completed during last five years & their Outlay	<b>Projects Completed</b>	<b>Total Outlay</b>
		4	Rs.36 lakhs
22.	Number of inventions and patents	1	
23.	Number of Ph.D thesis guided during last five years	2	
24.	Publications by faculty (last 5 years)	141	
25.	Average citation index and impact factor of publications	2	
26.	Number of Books in the Department Library, if any	745	
27.	Number of Journals/Periodicals in the departmental library	36	
28.	Number of Computers	119	
29.	Annual Budget (excluding salary) (2009-2010)	Financial Year 2009 – 2010 : 45 lakhs	

### C. Profile of the Department

1	Name of the Department	<b>Electrical and Electronics Engineering</b>														
2	Year of Establishment	1997														
3	Courses / Programmes and subject combinations offered	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%;">Programme</th> <th style="width: 50%;">Subject</th> </tr> </thead> <tbody> <tr> <td>B.E – Electrical and Electronics Engineering</td> <td>Physical Science Humanity and Languages Mathematics Computer Science Basic Engineering Core Subject Theory Laboratory Projects</td> </tr> <tr> <td>M.E – Power System Engineering</td> <td>Mathematics Core Subject Theory Laboratory Projects</td> </tr> <tr> <td>M.E – Power Electronics and Drives</td> <td>Mathematics Core Subject Theory Laboratory Projects</td> </tr> </tbody> </table>			Programme	Subject	B.E – Electrical and Electronics Engineering	Physical Science Humanity and Languages Mathematics Computer Science Basic Engineering Core Subject Theory Laboratory Projects	M.E – Power System Engineering	Mathematics Core Subject Theory Laboratory Projects	M.E – Power Electronics and Drives	Mathematics Core Subject Theory Laboratory Projects				
Programme	Subject															
B.E – Electrical and Electronics Engineering	Physical Science Humanity and Languages Mathematics Computer Science Basic Engineering Core Subject Theory Laboratory Projects															
M.E – Power System Engineering	Mathematics Core Subject Theory Laboratory Projects															
M.E – Power Electronics and Drives	Mathematics Core Subject Theory Laboratory Projects															
4	Number of Teaching posts sanctioned and filled	B.E (EEE) – Sanctioned : 24 Available : 27 M.E (PSE) - Sanctioned : 03 Available : 03 M.E (PED) - Sanctioned : 03 Available : 03														
5	Number of Administrative Staff	02														
6	Number of Technical Staff	31														
7	Number of Students (Men/Women) Give details course-wise	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 33%;">Course</th> <th style="width: 33%;">Boys</th> <th style="width: 33%;">Girls</th> </tr> </thead> <tbody> <tr> <td>B.E (EEE)</td> <td style="text-align: center;">207</td> <td style="text-align: center;">223</td> </tr> <tr> <td>M.E (PSE)</td> <td style="text-align: center;">20</td> <td style="text-align: center;">16</td> </tr> <tr> <td>M.E(PED)</td> <td style="text-align: center;">17</td> <td style="text-align: center;">19</td> </tr> </tbody> </table>			Course	Boys	Girls	B.E (EEE)	207	223	M.E (PSE)	20	16	M.E(PED)	17	19
Course	Boys	Girls														
B.E (EEE)	207	223														
M.E (PSE)	20	16														
M.E(PED)	17	19														
8	Ratio of Teacher to students	U.G – B.E(EEE) – 1 : 13 P.G – M.E(PSE) – 1 : 12 M.E(PED) – 1 : 12														
9	Ratio of to Teachers to Research scholars	(33 staff : 16Research scholars )      2.06 : 1														
10	Number of research scholars who have obtained their master’s degree from other institutions	18														
11	Number of teachers in academic bodies of other Autonomous Colleges and Universities	Nil														

12	Latest revision of the curriculum (year)	U.G – B.E (EEE) – 2010 P.G – M.E (PSE) – 2010 M.E (PED) – 2010	
13	Number of students passed in NET/SLET etc. (last 5 years)	01	
14	Success Rate of students	2009 Batch –97.70% 2010 Batch - 92.42%	
15	Demand Ratio (No. of seats : No. of applications)	Students are admitted under state level ranking by the Government of Tamilnadu.	
16	Awards and recognition received by faculty (last 5 years)	Awards : 01 Recognition : 01	
17	Faculty who have Attended Natl./Intl. Seminars (last 5 years)	National 15	International 10
18	Number of national/ international seminars organized (Last 5 years)	National 01	International 01
19	Number of teachers engaged in consultancy and the revenue generated	06	38.5 Lacks
20	Number of Ongoing projects and their total outlay	10	91 Lacks
21	Research projects completed during last five years & their Outlay	13	52.8 Lacks
22	Number of inventions and patents	--	--
23	Number of Ph. D theses guided during the last five years	Nil	
24	Publications by faculty (last 5 years)	53	
25	Average citation index and impact factor of publications	1	
26	Number of Books in the Departmental Library, if any	1191	
27	Number of Journals/Periodicals in the departmental library	25	
28	Number of Computers	132	
29	Annual -Budget (excluding salary) (2009-2010)	Financial Year 2009 – 2010 : 70 Lakhs	



### C. Profile of the Department

1	Name of the Department	<b>Electronics and Communication Engineering</b>					
2	Year of Establishment	1999					
3	Courses / Programmes and subject combinations offered	Basic Engineering	Core Course	Theory	Practical	Elective	Project
		1.Humanities and language 2.Physics Science 3.Mathematics 4.Computer Science 5.Engineering Graphics	ECE	29	15	5	2 (Phase-1 in VII-Sem & Phase 2 in VIII-Sem.)
4	Number of Teaching posts sanctioned and filled	B.E (ECE) – Sanctioned : 24 Available : 30					
5	Number of Administrative Staff	03					
6	Number of Technical Staff	19					
7	Number of Students (Men/Women) Give details course-wise	Course	Boys	Girls			
		B.E (ECE) II year	67	78			
		III year	79	79			
		IV year	95	47			
		TOTAL	(241)	(204)			
8	Ratio of Teacher to students	U.G – B.E(ECE) – 1 : 15					
9	Ratio of Teachers to Research scholars	(30 staff : 15 Research scholars) 2 : 1					

10	Number of research scholars who have obtained their master's degree from other institutions	17					
11	Number of teachers in academic bodies of other Autonomous Colleges and Universities	Nil					
12	Latest revision of the curriculum (year)	U.G – B.E (ECE) – 2010 Autonomous status					
13	Number of students passed in NET/SLET etc. (last 5 years)	Nil					
14	Success Rate of students	<table border="1"> <tr> <td>2009</td> <td>2010</td> </tr> <tr> <td>84%</td> <td>97.22%</td> </tr> </table>		2009	2010	84%	97.22%
2009	2010						
84%	97.22%						
15	Demand Ratio (No. of seats : No. of applications)	Students admitted under state level ranking by Government of Tamil Nadu.					
16	Awards and recognition received by faculty (last 5 years)	Awards producing cent percent results in Anna University examinations	Recognition				

		<p>2006-2007— 03</p> <p>2007-2008— 22</p> <p>2008-2009— 44</p> <p>2009-2010— 05</p>	<p><b>Prof.B.Gopi</b></p> <ul style="list-style-type: none"> <li>• "I – Fuel Indicator" Renesas Microcontroller Project Contest</li> </ul> <p><b>Dr.R.S.Sabeenian</b></p> <ul style="list-style-type: none"> <li>• "Best Faculty Award" for the Academic year 2009-2010 in the ECE/EEE Stream from the Nehru Group of Institutions</li> <li>• Best innovative project award for "Weed Detection using Multi-Resolution Analysis" from Indian National Academy of Engg, New Delhi.</li> </ul> <p><b>"Best Paper Award" for the following research papers in the year 2010</b></p> <ul style="list-style-type: none"> <li>• "Hand written Text to Digital Text Conversion uses Radon Transform and Back Propagation Network (RTBPN)" in the Springer LNCS, during the International Conference on Advances in Information and Communication Technologies ICT 2010 held on September 2010 at Cochin</li> <li>• "Multi Resolution Adaptive Video Streaming using Scalable Video Coding" in the IEEE Explorer, during the International Conference on Advances in Communication, Network and Computing CNC 2010 on October 2010 at Calicut</li> <li>• Awarded the Best R&amp; D activity award from the year 2006 to 2008</li> </ul> <p><b>Prof.D.Jayanthi</b></p> <p>ISTE-NIT Kozhikode National Award 2007 for Best B.Tech. Project"Alcohol Carbon Mono-Oxide Monitoring Equipment"</p>
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17	Faculty who have Attended Natl./Intl. Seminars (last 5 years)	<b>National</b> 12	<b>International</b> -
18	Number of national/international seminars organized (Last 5 years)	<b>National</b> 47	<b>International</b> Nil
19	Number of teachers engaged in consultancy and the	Nil	
20	Number of Ongoing projects and their total outlay	SONA SIPRO	5 Nos
21	Research projects completed during last five years & their Outlay	SONA SIPRO	Ongoing
22	Number of inventions and patents	Patent 1 (Applied)	
23	Number of Ph. D theses guided during the last five years	Nil	
24	Publications by faculty (last 5 years)	<b>National</b>	<b>International</b>
		29	39
25	Average citation index and impact factor of publications	<b>Citation index</b>	<b>Impact factor</b>
		13	0.765

26	Number of Books in the Departmental Library if any	2140 Nos.
27	Number of Journals/Periodicals in the departmental library	5 Nos
28	Number of Computers	158 Nos.
29	Annual Budget - (excluding salary) (2009-2010)	Financial Year 2009 – 2010: 47 Lakhs

### C. Profile of the Department

1. Name of the Department	<b>Computer Science and Engineering</b>		
2. Year of Establishment	1997		
3. Courses / Programmes and subject combinations offered	B.E(Computer Science and Engineering) M.E(Computer Science and Engineering) M.E(Software Engineering)		
4. Number of Teaching posts sanctioned and filled	B.E(CSE) - Sanctioned : 24    Filled : 28 M.E(CSE) - Sanctioned : 3    Filled : 3 M.E(SE) - Sanctioned : 3    Filled : 3		
5. Number of Administrative Staff	02		
6. Number of Technical Staff	10		
7. Number of Students (Men/Women) Give details course-wise	<b>Course</b>	<b>Boys</b>	<b>Girls</b>
	B.E(CSE)	166	252
	M.E(CSE)	15	21
	M.E(SE)	11	25
8. Ratio of Teacher to students	UG - 1:15 PG - 1:12		
9. Ratio of to Teachers to Research scholars	3:1		
10. Number of research scholars who have obtained their master's degree from other institutions	4		
11. Number of teachers in academic bodies of other Autonomous Colleges and Universities	1		
12. Latest revision of the curriculum (year)	UG – BE(CSE) – 2008 PG – ME(CSE) – 2007 PG – ME(SE) – 2007		
13. Number of students passed in NET/SLET etc. (last 5 years)	NET : 2 GATE : 20		

14. Success Rate of students	2002-2006 = 90.47% 2003-2007 = 95.95% 2004-2008 = 95.37% 2005-2009 = 95.52% 2006-2010 = 96.96%	
15. Demand Ratio (No. of seats : No. of applications)	120 : 120	
16. Awards and recognition received by faculty (last 5 years)	Number of Awards for Academic excellence every year : 25. Research awards : 4 Number of Faculty members recognized for 'Who's who in the world' : 2 Cambridge Who's who 2010 : 1	
17. Faculty who have Attended Natl./Intl. Seminars (last 5 years)	National	International
	69	10
18. Number of national/ international seminars organized (Last 5 years)	17	-
19. Number of teachers engaged in consultancy and the revenue generated	10 ( 24.312 lakhs )	
20. Number of Ongoing projects and their total outlay	4 ( 4 lakhs)	
21. Research projects completed during last five years & their Outlay	8 ( 8 lakhs)	
22. Number of inventions and patents	-	
23. Number of Ph. D theses guided during the last five years	6 (Guiding)	
24. Publications by faculty (last 5 years)	20	

	<b>Name of the Staff</b>	<b>Title/Journal</b>	<b>Impact factor</b>
25. Average citation index and impact factor of publications	Dr.M.Usha	International Journal of Business Information Systems	0.8
		Journal of Computer Society of India	-
		Asian Journal of Information Technology	-
		International Journal of Computer Science and System Biology	-
	Dr. B.Sathiyabhama	WSEAS Transactions on Information Science and Applications	0.1
		Journal of Current Science	0.2
		International Journal of Computational Intelligence and Healthcare Informatics	-
		IJCSES International Journal of Computer Sciences and Engineering System	-
26. Number of Books in the Departmental Library, if any		3117	
27. Number of Journals/Periodicals in the departmental library		32	
28. Number of Computers		248 ( 64.9 Lakhs)	
29. Annual Budget 2010 – 2011 (excluding salary)		Financial Year 2009 – 2010 : 62 lakh	



### C. Profile of the Department

1. Name of the Department	<b>Information Technology</b>		
2. Year of Establishment	1998		
3. Courses / Programmes and subject combinations offered	<p><b><u>B. Tech/ Information Technology</u></b></p> <p>Humanities and Language : 1</p> <p>Science : 1</p> <p>Mathematics : 3</p> <p><b><u>Core Engineering Technology</u></b></p> <p>Theory : 23</p> <p>Elective : 5</p> <p>Laboratory : 13</p> <p>Project : 1</p>		
4. Number of Teaching posts sanctioned and filled	Sanctioned: 24; Filled: 26		
5. Number of Administrative Staff	9		
6. Number of Technical Staff	15		
7. Number of Students (Men/Women) Give details course-wise	<b>Year</b>	<b>Men</b>	<b>Women</b>
	IV	78	61
	III	66	81
	II	58	86
		-----	
	<b>Total</b>	<b>202</b>	<b>228</b>
8. Ratio of Teacher to students	1: 14		
9. Ratio of to Teachers to Research scholars	(Staff-26: Research scholars: 15) 1.75 : 1		

10. Number of research scholars who have obtained their master's degree from other institutions	11
11. Number of teachers in academic bodies of other Autonomous Colleges and Universities	Nil
12. Latest revision of the curriculum (year)	2010
13. Number of students passed in NET/SLET/GATE etc. (last 5 years)	Nil
14. Success Rate of students	94.12% (Last 2 years)
15. Demand Ratio (No. of seats : No. of applications)	Students admitted under State Level ranking by Government of Tamilnadu
16. Awards and recognition received by faculty (last 5 years)	Recognition: 7 Staff Award: 224
17. Faculty who have Attended Natl./Intl. Seminars (last 5 years)	National Seminar attended : 59 International Seminar attended : Nil
18. Number of national/ international seminars organized (Last 5 years)	National Seminar organized: 23
19. Number of teachers engaged in consultancy and the revenue generated	Staff Engaged : 1 No. of Consultancy: 16 Revenue generated : Rs. 4,80,374/-
20. Number of Ongoing projects and their total outlay	Ongoing Projects: 3 Total outlay : Rs. 15,00,000/-
21. Research projects completed during last five years & their Outlay	Completed Projects : 9 Total outlay : Rs. 1,64,160/-
22. Number of inventions and patents	1 (In progress)
23. Number of Ph. D theses guided during the last five years	Nil

24. Publications by faculty (last 5 years)	Journal Publications : 22 Paper publication in National : 37 Paper publication in International : 30
25. Average citation index and impact factor of publications	Average Citation index: Nil Impact factor of publication : 0.8
26. Number of Books in the Departmental Library, if any	626
27. Number of Journals/Periodicals in the departmental library	Journals : National - 18 International - 36
28. Number of Computers	350 computers
29. Annual Budget (excluding salary) (2009-10)	Financial Year 2009 – 2010 :54 lakhs

### C. Profile of the Department

1.	Name of the Department	<b>Civil Engineering</b>		
2.	Year of Establishment	2003		
3.	Courses / Programmes and subject combinations offered	B.E – Civil		
4.	Number of Teaching posts sanctioned and filled	16 - 18		
5.	Number of Administrative Staff	3		
6.	Number of Technical staff	11		
7.	Number of Students (Men/Women) Give details course – wise	Course	Men	Women
		B.E	261	147
8.	Ratio of Teacher to Students	1:13		
9.	Ratio of to Teacher to Research Scholars	11:7		
10.	Number of research scholars who have obtained their master’s degree from other institutions	7		
11.	Number of Teachers in academic bodies of other Autonomous Colleges and Universities	1		
12.	Latest revision of the curriculum (year)	2008		
13.	Number of students passed in NET/SLET/GATE etc. (last 5 years)	20		
14.	Success Ratio of students			
	2005 – 2009 Batch 2006 – 2010 Batch	89 % 93%		
15.	Demand Ratio (No. of seats: No. of application )	-		
16.	Awards and recognition received by faculty (last 5 years)	-		
17.	Faculty who have attended Natl. Intl. Seminars (last 5 years)	20		
18.	Number of national/international seminars organized (last 5 years)	2		
19.	Number of teacher engaged in consultancy and the revenue generated	5 / 25 Lakhs		

20.	Number of Ongoing projects and their total outlay	1
21.	Research projects completed during last five years & their Outlay	-
22.	Number of inventions and patents	-
23.	Number of Ph.D thesis guided during last five years	-
24.	Publications by faculty (last 5 years)	13
25.	Average citation index and impact factor of publications	-
26.	Number of Books in the Department Library, if any	584
27.	Number of Journals/Periodicals in the departmental library	14
28.	Number of Computers	30
29.	Annual Budget (excluding salary) (2009-10)	Financial Year 2009 – 2010 : 36 Lakhs

### C. Profile of the Fashion Technology Department

1.	Name of the Department	<b>Fashion Technology</b>			
2.	Year of Establishment	2005			
3.	Courses / Programmes and subject combinations offered	<u>Programme</u> BTech Textile Technology (Fashion Technology) <u>Subject Combinations Offered</u> a) Humanities and Languages: 2 Th b) Physical Sciences : 4 Th + 2 Lab c) Computer Science : 1 Th + 2 Lab d) Basic Engineering : 6 Th + 4 lab e) Core Engineering / Technology Courses <ul style="list-style-type: none"> <li>• Theory : 23</li> <li>• Electives : 4</li> <li>• Laboratory : 13</li> <li>• Project Work : 1</li> </ul>			
4.	Number of Teaching posts sanctioned and filled	Sanctioned: 12 Filled: 12			
5.	Number of Administrative Staff	1			
6.	Number of Technical Staff	3			
7.	Number of Students (Men/Women) Give details course-wise	<b>Year</b>	<b>M</b>	<b>W</b>	<b>Total</b>
		Final Year	26	38	64
		Third Year	30	38	68
		Second Year	31	36	67
		First Year	20	37	57
		<b>Total</b>	107	149	256
8.	Ratio of Teacher to students	Sanctioned student intake: 60 No. of Staff : 12 Teacher Student ratio 1:15 (for sanctioned intake)			
9.	Ratio of Teachers to Research scholars	12:5			
10.	Number of research scholars who have obtained their master's degree from other institutions	5			
11.	Number of teachers in academic bodies of other Autonomous Colleges and Universities	1			
12.	Latest revision of the curriculum (year)	2010			
13.	Number of students who have passed NET/SLET, etc. (last 5 years)	NIL			

14.	Success Rate of students:	2005-2009 Batch: 57/61 or 93.44% 2006-2010 Batch: 64/65 or 98.46%	
15.	Demand Ratio (No. of seats : No. of applications)	Students are admitted under state-level ranking by Tamilnadu Government	
16.	Awards and recognition received by faculty (last 5 years)	<ul style="list-style-type: none"> <li>All the faculty have received at least two awards each per semester during the past five years for excellent (95-100%) academic results.</li> <li>At least 4-5 staff members of the department have received awards during the past five for their special contribution to the college.</li> </ul>	
17.	Faculty who have Attended Natl./Intl. Seminars (last 5 years)	All the faculty have attended one or another of a total of 15 national and 21 international seminars/conferences from 2006 to 2010.	
18.	Number of national / international seminars organized (Last 5 years)	4 (National Seminar-1) Nationalconference-3	-
19.	Number of teachers engaged in consultancy and the revenue generated (last five years)	Consultancy	Revenue Generation
		5	Rs. 5,40,000
20.	Number of Ongoing projects and their total outlay	9 projects: Rs. 6,42,560/-	
21.	Research projects completed during last five years and their Outlay	1 project	Rs 35,000
22.	Number of inventions and patents	Inventions	Patents
		One (weaving)	2 (patents applied for)
23.	Number of PhD theses guided during the last five years	NIL	
24.	Publications by faculty (last 5 years)	43	
25.	Average citation index and impact factor of publications	Indian Journal of Fibre and Textile Research (Impact factor: 0.215)	
26.	Number of Books in the Departmental Library, if any	636	
27.	Number of Journals/Periodicals in the departmental library	12	
28.	Number of Computers	41	
29.	Annual Budget (excluding salary) (2009-2010)	Financial Year 2009 – 2010 : 20 Lakhs	

### C. Profile of the Department

1	Name of the Department	<b>General Engineering (Mathematics, Science &amp; Humanities of Language)</b>		
2.	Year of Establishment	1997		
3.	Courses/Programmes and subject combinations offered	-		
4	Number of Teaching posts sanctioned and filled	Sanctioned : 52, Filled : 57		
5.	Number of Administrative staff	10		
6.	Number of Technical Staff	10		
7.	Number of Students(Men / women) Give details course-wise	Male – 490, female – 402 (I Year B.E / B.Tech)		
8.	Ratio of Teacher to Students	57 : 892		
9.	Ratio of Teachers to Research Scholars	6:24		
10.	Number of research scholars who have obtained their master's degree from other institutions	24		
11.	Number of teachers in academic bodies of other Autonomous College and Universities	Nil		
12.	Latest revision of the curriculum (year)	2010		
13.	Number of Students passed in NET/SLET etc. (Last 5 Years)	NA		
14.	Success Rate of Students	Year	Semester I	Semester II
		2008-2009	85.66 %	97.02 %
		2009-2010	78.2 %	77 %
15.	Demand Ratio (No. of Seats : No. of Applications)	Students Admitted Under State Level Ranking By The Government of Tamil Nadu		
16.	Awards and recognition received by faculty (last 5 years)	165		



17.	Faculty who have attended National. / international seminars (last 5 years)	100
18.	Number of national / international seminars organized (Last 5 Years)	18
19.	Number of Teachers engaged in consultancy and the revenue generated (last 5 years)	10 (66 lak)
20.	Number of Ongoing projects and their total outlay	15 (90 lak)
21	Research projects completed during last five years & their outlay	2 (15 lak)
22	Number of inventions and patents	2
23	Number of Ph.D thesis guided during the last five years	4
24	Publications by faculty (last 5 years)	194
25	Average citation index and impact factor of publications	2.53
26	Number of books in the Departmental Library, if any	878
27	Number of Journals/ periodicals in the department library	8
28	Number of Computers	185
29	Annual Budget (Excluding salary) (2009-10)	Financial Year 2009 – 2010 : 13 lakhs

### C. Profile of the Department

1. Name of the Department	<b>Master of Business Administration</b>	
2. Year of Establishment	1998	
3. Courses / Programmes and subject combinations offered	Core Subject – 17 nos. Elective – 8 nos. Project Work – 2 nos.	
4. Number of Teaching posts sanctioned and filled	Sanctioned – 21 Filled – 23	
5. Number of Administrative Staff	4 nos.	
6. Number of Technical Staff	2 nos.	
7. Number of Students (Men/Women) Give details course-wise	I yr – Men - 93 Women- 75 Total – 168	II Yr – Men – 63 Women – 64 Total - 127
8. Ratio of Teacher to students	1:12.18	
9. Ratio of to Teachers to Research scholars	1:0.4	
10. Number of research scholars who have obtained their master's degree from other institutions	8	
11. Number of teachers in academic bodies of other Autonomous Colleges and Universities	1 – Governing Body members, Salem Productivity Council	
12. Latest revision of the curriculum (year)	2009 (Anna University of Technology, CBE) 2010 (Autonomous)	
13. Number of students passed in NET/SLET etc. (last 5 years)	-	
14. Success Rate of students	2007-2009 - 97.41% 2008-2010 – 98.35%	
15. Demand Ratio (No. of seats : No. of applications)	Students are selected by State level ranking as per Government of Tamilnadu	

16. Awards and recognition received by faculty (last 5 years)	<p>Book Publication(International) – 1 faculty</p> <p>Book Publication (National) - 4 faculty members</p> <p>5 faculty members published 6 articles in International Journals.</p> <p>17 faculty members published 76 articles in National Journals.</p> <p>5 faculty members visited Assumption University of Thailand, Bangkok.</p> <p>8 faculty members are involved in training and consultancy work.</p>	
17. Faculty who have Attended Natl./Intl. Seminars (last 5 years)	National 33	International 21
18. Number of national/ international seminars organized (Last 5 years)	National 3 nos.	International -
19. Number of teachers engaged in consultancy and the revenue generated	8 nos.	Rs. 52,87,100
20. Number of Ongoing projects and their total outlay	1	Rs. 14,40,000
21. Research projects completed during last five years & their Outlay	1	Rs. 30,921
22. Number of inventions and patents	1 no.	Patent Filed
23. Number of Ph. D theses guided during the last five years	6 faculty members are pursuing Ph.D	
24. Publications by faculty (last 5 years)	91 nos.	
25. Average citation index and impact factor of publications	-	
26. Number of Books in the Departmental Library, if any	<p>4644 Titles</p> <p>11847 Volumes +</p> <p>500 Volumes available in Director's Cabin</p>	
27. Number of Journals/Periodicals in the departmental library	85	
28. Number of Computers	128	
29. Annual Budget (excluding salary) (2009-2010 )	<p>Financial Year 2009 – 2010 :</p> <p>18 Lakhs</p>	

### C. Profile of the Department

1.	Name of the Department	<b>Master of Computer Applications</b>			
2.	Year of Establishment	2000			
3.	Courses / Programmes and subject combinations offered	<u>Course:</u> Master of Computer Applications <u>Subject Combinations Offered:</u> i) Core Curriculum <ul style="list-style-type: none"> <li>• Theory:20</li> <li>• Elective:3</li> <li>• Laboratory:14</li> <li>• Project Work:1</li> </ul> ii) Humanities and Sciences <ul style="list-style-type: none"> <li>• Theory:1</li> </ul> iii) Business Administration <ul style="list-style-type: none"> <li>• Theory:1</li> </ul>			
4.	Number of Teaching posts sanctioned and filled	Sanctioned : 24 + 1 Director Filled : 24 + 1 Director			
5.	Number of Administrative Staff	02			
6.	Number of Technical Staff	04			
7.	Number of Students (Men/Women) Give details course-wise	<b>Year</b>	<b>Men</b>	<b>Women</b>	<b>Total</b>
		I	69	49	118
		II	65	55	120
		III	62	54	116
		<b>Total</b>	<b>196</b>	<b>158</b>	<b>354</b>
8.	Ratio of Teacher to students	Faculty Student Ratio -1:15 (for sanctioned intake)			
9.	Ratio of Teachers to Research scholars	2:13 (2 staff : 13 Research scholars )			
10.	Number of research scholars who have obtained their master's degree from other institutions	11			
11.	Number of teachers in academic bodies of other Autonomous Colleges and Universities	02			
12.	Latest revision of the curriculum (year)	2010			
13.	Number of students passed in NET/SLET etc. (last 5 years)	01			
14.	Success Rate of students	100%			
15.	Demand Ratio (No. of seats : No. of applications)	Students are admitted under state-level ranking by Tamilnadu Government.			

16.	Awards and recognition received by faculty (last 5 years)	<ul style="list-style-type: none"> <li>• Almost all of the Faculty members received 100% and 95% above result produced in the Anna University Examinations given by the Management.</li> <li>• Department staff members received awards for their contributions</li> </ul>	
17.	Faculty who have Attended Natl./Intl. Seminars (last 5 years)	<b>National</b> 18	<b>International</b> 5
18.	Number of national/ international seminars organized (Last 5 years)	<b>National</b> 11	<b>International</b> Nil
19.	Number of teachers engaged in consultancy and the revenue generated	<b>Teachers</b> 3	<b>Revenue</b> 26,33,000
20.	Number of Ongoing projects and their total outlay	<b>Ongoing Projects</b> 4	<b>Outlay</b> 6 Lakhs
21.	Research projects completed during last five years & their Outlay	<b>Projects</b> 1	<b>Outlay</b> 23,458
22.	Number of inventions and patents	Number of Invention - <b>01</b> (copyright received, applied for patent)	
23.	Number of Ph. D theses guided during the last five years	Nil	
24.	Publications by faculty (last 5 years)	<ul style="list-style-type: none"> <li>• Journal Publication: 22</li> <li>• National Conference Publications: 58</li> <li>• International Conference Publications: 20</li> </ul>	
25.	Average citation index and impact factor of publications	1.70	
26.	Number of Books in the Departmental Library, if any	8974	
27.	Number of Journals/Periodicals in the departmental library	<b>National</b> 24	<b>International</b> 24
28.	Number of Computers	184	
29.	Annual Budget (excluding salary) (2009-2010)	Financial Year 2009 – 2010 : 30 Lakhs	

## **PART –II : The Evaluative Report**

### **A. Executive Summary**

Sona College of Technology is one of the most renowned and fastest growing Engineering Institutions in South India. The college has a visionary Management, a team of dedicated, experienced and well equipped staff, world class infrastructure and an amazing ambience conducive for learning. No wonder Sona is rated high by reputed organizations and magazines like competition success Review, Outlook, Electronics for you, Dalal Street, Career 360 etc. It stands within the top 10 institutions in Tamilnadu and 20 in India.

#### **Career Aspects**

The vision of Sona College of Technology is to become a model institute of excellence in technical education pertaining to Science, Technology and Management Studies by offering a full range of programmes with a global focus striking a balance between academic, social, economical and ethical goals of our Management, faculty and students.

The mission of Sona College of Technology is to be a vibrant and model institution of excellence in imparting quality education in the areas of Science, Engineering, Technology and Management and also to orient the aspiring students and scholars towards imbibing the virtues for an overall development to enable them to meet the ever-growing challenges of the global society.

The goals and objectives of Sona College of Technology which are set in alignment with the vision and mission of the college aim at contributing to the

academic standing and overall knowledge development of the students. By maintaining state-of-the-art infrastructure and learning environment, the college promotes research and knowledge development programmes, collaborates with institutions and industries, inculcates moral, ethical and environment values among students and staff and disseminates technical knowledge in the region by continuing education programmes.

Following the Autonomous status conferment from 2010-2011 for 5 years by Anna University of Technology, Coimbatore, the Academic Council and Board of Studies have been constituted. The Board of Studies involves the participation from Industry and academics to ensure that the education offered caters to the industrial requirements. New courses and programmes are introduced based on global trends and requirements. In all the branches, around 60-65% the courses are practical oriented. The industrial training, project interuship and industrial visits at reputed organizations strengthen their capability to work in real time industry environment. All Engineering Programmes have included atleast one programming language course with the degree of imparting knowledge ranging from basic awareness to highly technical course in computer applications.

In addition to the technical skills, courses to develop a students' over all personality are also offered. To promote good civic sense and healthy mind, students are encouraged to indulge in social welfare activities through NSS, NCC, YRC, etc. Courses on yoga, meditation, personality development, professional ethics and cultural education are imparted to students sensitive and responsive to our societal value system.

Aiming to become a world class institution, Sona has arranged twinning programmes with foreign universities like Syracuse University, USA and Wazne State University, USA, for MS. Programmes and research collaborations.

The performance of the students is assessed by weekly tests and model examinations through which both the slow learners and advanced learners are identified. To improve the performance of slow learners, periodic monitoring, regular counseling and additional practices in examination-centered tests are given. The performances of the words are brought to the notice of the parents through proper communication system and parents' meetings are conducted to discuss them. In addition to the input for academic performances, training programmes to improve the student's skills in Group Discussion, Aptitude and interview are organised to enhance the scope for students' placement. Experts from academics and corporate world and entrepreneurs are invited to deliver special lectures and technical talks.

### **Teaching –Learning Evaluation**

A conducive learning environment is created by providing both slow and advanced learners with relevant exposure and experience which help them overcome learning challenges. At the tutorial classes, more attention is paid towards slow learners and through peer-coaching, they get a clearer understanding of complex concepts they could not learn well in class.

All the students are guided and counselled by class counselors, who act as chief mentors of the class. Besides this, about 20 students are attached to a Faculty



Advisor. It is with their academic and personal guidance that the students find their stay on the campus a comfortable one.

The teaching-learning process is made interesting by the use of appropriate teaching aids like OHP and VHP. The computer-Based Teaching / Training packages used for most of the UG Programme courses ensure better understanding of the concepts among the students. The students are exposed to excellent learning environment through the EDUSAT, connected with IIT, Bombay Indo-US Webcast / Webinar in collaboration with Infosys, Amrita's A-VIEW (Virtual Interactive E-Learning World) facility video lecture tapes / CDS/ DVDs etc. These facilities in addition to the central and department library enable the students to learn through topics of emerging importance under 'beyond the syllabus' category. Guest lectures, seminars and workshops by invited industry experts and inter-college student symposia are organized to expand the scope for learning.

Understanding the importance of upgrading and equipping the faculty members with the knowledge about the latest advancements in the subjects they handle, the college supports the staff financially to participate in a good number of AICTE / Anna University sponsored staff development programmes. Owing to the encouragement by the Management, the staff makes full use of these opportunities for career growth.

Sona's library, which is the main source of attraction, is the back bone of its knowledge pool. The library has a vast collection of learning and reference resources that meet the needs of all the departments in the college.

S. No.	Resource	No. of Titles	No. of Volumes
1	Textbooks	12.182	50,911
2	General Books	4697	6490
3	Reference Books	2462	2731
4	International Journals	110	Total no. of back volumes - 1983
5	National Journals	128	
6	General Magazines	50	-
7	CDs / DVDs	2255	-
8	Databases CMIE – “Prowess”		
9	Online Journals – IEL, ACM, ASME		
10	AV Resources – NPTEL video lectures		

### **Research, Consultancy and Extension**

Technical education should ultimately aim at research and innovations. Aspiring to become a world class technical institute, Sona encourages both its staff and students who have deep interest in research to indulge in R&D activities. The fact that the college has an advanced R&D centre housing 32 research centres which was inaugurated by Dr. A.P.J. Abdul Kalam stands testimony to the importance given to research activities.

Faculty doing research are provided with required equipment, seed money, software, books and journals. Good quantum of financial assistance is made available for paper presentation and travel expenses. The revenues generated through external grants, research and consultancy is 199.53 lakhs. Sona of the products developed by the college are used in space science, satellite communications, undersea applications and measurement applications by ISRO and other industries. The college offers genuine and relevant technical services for the rural development purposes.

Sona has to its credit 538 National Conferences, 336 International Conferences and 272 International and National Journal publications by its faculty members. There are currently 25 university recognized research supervisors/ guides for Ph.D in various specializations of Engineering, Science, Humanities, Computer Applications and Management. Presently there are 113 research scholars pursuing Ph.D in the college.

There is a good amount of contribution from the students' side for research promotion. They have presented and published member of papers in National and International Conferences and journals respectively and won many accolades. Some of the major research facilities provided for both staff and students include

- (i) Language lab
- (ii) High Voltage Test and Measuring Equipment
- (iii) Free Open Source Software facility
- (iv) IBM Centre for Excellence
- (v) High Energy Ball Mill
- (vi) Metallurgical Microscope with image processing
- (vii) Thermal Evaporation Vacuum Coating Unit
- (viii) Spin coater
- (ix) Adobe Bundle, Oracle database, Visual Prolog, SPSS, Apple MAC
- (x) 5 Million Spartan FPGA Kits
- (xi) XILINX, MATLAB, MULTSIM
- (xii) Antennae Kit Set, Video Fiber Link

Since Sona believes in collaborative research activities it has signed MoUs with renowned Indian and Foreign Universities, industries and MNCs. The college also

organizes faculty training facility at industries, visits by industrialists to institution, students visit to industries, joint product development, joint academic programmes with foreign universities, to mention a few.

The research collaborations are already on with University of Bologna, Italy and University of Nebraska, USA. The CSE Department is working in collaboration with Syracuse University, New York, USA to offer an ME (Twinning) programme. Similar proposal is in process with Wayne State University, Michigan, USA.

The following are few of the major and minor projects ongoing in the college:

- (i) Radio wave propagation under rain and water droplets interference.
- (ii) Brushless DC Motor design and development for ISRO.
- (iii) Under-water High-Speed Brushless DC Motor design and development for National Institute of Ocean Technology.
- (iv) CT Caliber for measurement for Megawin Switchgear Pvt Ltd:
- (v) High Voltage Leakage and Insulation characterization in presence of impurity deposits on wires.
- (vi) Nano Technology and nano-materials.
- (vii) Photonics and Nano Technology for Transistors

All the quality research works by the college are well supported and funded by AICTE, DST, ISRO, CSIR, TNSCST, CCSTDS, IEEE, AU and IGCAK.

### **Infrastructure and Learning Resources**

Sona has well structured maintained infrastructure facilities which include

- Bright and airy classroom.
- State –of-the art laboratories.

- Industry standard training centers
- Well stacked library.
- Sophisticated computer centers
- Homely hostel facilities
- Multimedia language laboratory.
- Advanced R&D Centers
- Continuing Education centre and so on

The master plan of the college campus indicating the existing buildings and the projected expansion in the future is enclosed. Apart from the academic facilities, the college also has common room, wash/ rest room etc and special facilities are provided for differently abled students.

Sona has abundant learning resources in terms of laboratory and library facilities. Each Engineering lab is equipped with advanced machineries and equipment. The college has excellent computing facilities. Totally, there are 1750 computers on the campus. The computers have 8 Mbps leased line internet bandwidth which is made available to the staff free of cost for carrying out any academic related works.

## **Student support and progression**

With an initial intake of 160 in 1997, the college has grown up to 4490 as its present strength. There are 200 students from 54 nations across the world. The pass percentage of students in university examinations ranges from 85 to 95%. During the past 5 years, the students have secured 97 ranks which include 9 gold medalists. Apart from the teaching and training for better performance in academics, the students are also trained for getting placed in companies. Training Programmes are arranged through leading companies like Infosys, Cognizant, WIPRO through which the students are updated on the industrial expectations to increase the students' employability skills. An exclusive department for training takes care of the placement training needs of the students. During the last 5 years, an average of 70-75% of the students has got placed on campus.

The college supports the students with financial aid by way of scholarships. Following are the schemes by which the students are supported financially. 10% of the admitted B.E and B.Tech degree students are getting Full Tuition Fee Waiver as per AICTE guidelines.

All the first graduates are getting 50% Tuition Fee Waiver from Government of Tamilnadu. All the BC, MBC, SC, ST students are getting Government scholarships.

Apart from Government sources, the management sanction annually,

Rs. 5.0 lakh for merit-cum-means category

- Benefits 85 students last year

Rs. 5.0 lakh for sports category

- Benefits 104 students last year

Rs. 1.0 lakh for physically-challenged and wards of ex-service man

- Benefits 20 students last year

Rs. 0.5 lakh for NSS, NCC and YRC category

- Benefits 13 students last year

Rs. 2.0 lakh for students lost their parents category

- Benefits 9 students last year

Rs. 8.0 lakh for best performance in University Examinations

- Benefits 324 students last year

The college takes care of the welfare of all the students including overseas, NRI, differently abled and SC/ST students. Apart from the financial support, they are given counseling by the faculty members to ensure quality living and education at Sona.

### **Governance and Leadership**

The Secretary is responsible for framing policies, creating infrastructure and administering and steering the organization towards growth. Sona has a functional organizational structure. The Principal is the Head of the Institution. He executes objectives of the Governing Body liaisons with DOTE/AICTE/University/UGC etc., ensures infrastructure and other mandatory resource requirements and monitors academic, co-curricular and extra-curricular activities. Also, he suggests new courses, ensures discipline in the college, motivates staff in realizing objectives, allocates budgets for the departmental activities, conducts periodic review meetings with HODs, encourages staff and students to promote research activities and continuing education programmes. The major activities by the departments are carried out with the approval of the Principal. Thus, all the

approval letters should bear the signature of the HOD concerned and the Principal.

This helps in establishing the leadership system.

“Principal” is the Head of the Institution. He performs the following activities:

- Executes objectives of the governing body
- Liaisons with DOTE/AICTE/University/UGC, etc.
- Ensures infrastructure and other mandatory resource requirements
- Suggests new courses that may be implemented
- Monitors academic activities
- Monitors co-curricular and extracurricular activities
- Ensures discipline in the college.
- Motivates Staff in realizing Objectives
- Ensures Budgetary allocation for the department activities
- Conducts periodic review meetings with HODs
- Ensure research activities among the students and staff
- Ensures other continuing education and other activities related to social activities

Major activities carried out by the departments shall be done with the approval of the Principal. All Approval letters should bear the signature of the concerned Head of the department, and the Principal. This way, the leadership system is established.

To translate quality to the functioning of its various administrative and academic units “Quality Objectives” consistent with the quality policy are formulated in measurable terms in different functional areas at both the college-level and department-level.



The Heads of the Departments and section-in-charges ensure that the objectives are achieved within the stipulated time interval. The status of attainment of Quality objectives are reviewed and if necessary revised during “Management Review Committee” (MRC) meetings conducted as part of “ISO - Quality Management System”(QMS) requirements.

- Department level decisions are taken by the Heads of the Department in consultation with the teaching faculty.
- Any major decisions pertaining to the departments are finalized by the Heads of the Departments with the approval of the Principal and the Secretary.
- HODs and Senior faculty are members of the various committees constituted for the effective functioning of the institution like advisory council, academic council, Board of Studies, Planning and Evaluation committee, etc., and their opinions are sought before any major policy decisions are finalized.

Every department acts as an autonomous unit, with the Heads of the Departments being delegated powers to take decisions related to their department. This makes them separate ‘Strategic Business Units’ (SBUs), and so ensures quick decision making and efficient functioning. The HODs shall be solely responsible for the performance of the department in academic and other activities.

Employees are motivated for their contribution, as under:

- Giving increment for upgrading Qualification (either in the month of June or December every year, based on the date of joining)
- Giving financial support for Presenting / Publishing papers in National / International Conferences / Journals
- Giving incentive for Involving in R & D work and Patenting or Commercialization
- Giving incentive for involving in the Industry-Institute Interaction activities of the College and Department
- Giving cash awards for showing good performance in Academic results
- Giving cash awards for making special contributions to the Department / College

The increments and incentives are sanctioned by the Management under recommendations by the HODs, HRD.

The various statutory bodies and their functions in brief, are as follows:

- **Governing body**  
(which formulates Policy regarding Academic and Administrative matters)
- **Academic Council**  
(which works out detailed activities regarding academic matters)
- **Board of Studies**  
(which decide the Curriculum and Syllabi)
- **Finance Committee**  
(which decide matters related to finance)
- **Examination Committee**  
(which decide matters related to the conduct of Exams)

- **Planning and Evaluation Committee**  
(which is responsible for Planning and evaluating the functioning of the depts.)
- **Grievance Appeal Committee**  
(which addresses the grievances of the students)
- **Admission Committee**  
(which decides on policies regarding student admissions)
- **Library Committee**  
(which decide on the functioning of Library)
- **Student Welfare Committee**  
(which addresses the Welfare activities of the students)
- **Extracurricular Activities Committee**  
(which decide on the Extracurricular activities)
- **Academic Audit Committee**  
(which plans for audit of the departments)
- **Research and Development Committee**  
(which plans and execute R & D activities)
- **Anti Ragging Committee**  
(which addresses issues related to ragging)

Frequencies of the meetings are as follows:

- Governing body meeting : Once in a year.
- Academic Council meeting : Once in a year.
- Board of Studies meeting : Once in a year.
- Finance Committee meeting : Once in a year.
- Examination Committee meeting : Once in a year.
- Planning and Evaluation Committee meeting: Twice a year

The decisions taken at the Governing body meeting, is implemented in the Academic council and Finance committee.

The Decision taken at the Board of Studies meeting of each department is implemented by the Academic Council.

The Planning and evaluation committee ensures implementation of the decisions taken and objectives set.

Almost all the resolutions passed in the Management Council meeting, were implemented last year.

### **Innovative Practices**

After creating a system, any organization should aspire to be successful in the long run. Hence, Sona relies totally on innovative practices to ensure quality education. In addition to the university syllabus, value added courses are offered to the students in different functional areas. Technical skill development courses and contemporary courses are offered by Continuing Education Centres. Since the faculty members are members in the Board of Studies, they offer constructive suggestions to promote innovation in curriculum. Every faculty identifies few topics in their subjects which are beyond the syllabus. Also, students' feedback is taken every semester in order to implement innovative teaching methods in the curriculum. When new programmes are introduced, emphasis is given for industry related courses.

Innovation is adopted in the teaching methodology. Some of the practices involve case analysis

Modern Teaching methods in practice other than the lecture method

- Case Analysis
- Role Play
- Factory visits
- Field Visits
- Co-operative learning
- Management games
- Activity/Action Based Learning
- Video Documentaries
- Out Bound Training(OBT)

Participation of teachers in academic and personal counselling of students

- Academic and non- academic counseling for the students are done periodically by the respective faculty advisors and Class Counsellors
- Placement training involves like Group Discussion, Aptitude skill test, mock interview are provided to all the students.
- Corporate experts/Entrepreneurs are invited to deliver guest lectures in order to provide industry oriented exposure.

**Staff Achievements:**

- Book Publication(International) – 1 faculty
- Book Publication (National) - 4 faculty members
- 5 faculty members published 6 articles in International Journals.
- 17 faculty members published 76 articles in National Journals.
- 5 faculty members visited Assumption University of Thailand, Bangkok
- 8 faculty members are involved in training and consultancy work.
- One faculty member and the department played a key role in setting up CII, Salem Chapter.

- Two Training programs (Diploma in Marketing management – 6 months and Strategic Leadership for Schools in Changing Environment – 2 weeks) conducted under Government of India Project for HRD of Private Sector for Royal Government of Bhutan.

### Students Achievements

S.No	Name	University Rank	University
1	Ms. Raja Rajeswari	<b>16<sup>th</sup> Rank</b>	Anna University Chennai
2	Mythili. A	<b>41<sup>st</sup> Rank</b>	
3	Swathi Elangovan	<b>46<sup>th</sup> Rank</b>	

Involvement of students in academic/co-curricular and other activities of the department.

Year	No. of Meets Attended	No. of Events Participated	Prizes won	Overall Championship
2005-2007	2	2	2	-
2006-2008	9	29	16	1
2007-2009	12	42	19	4
2008-2010	10	51	20	4

Innovations and best practices initiated/adopted by the departments during the last five years.

Apart from Lecture methods the other methods adopted are Case Analysis, Role Play, Factory Visits, Field Visit, Co-operative Learning, Action Based learning, Management Games.

Also Value added courses are offered in all the areas like Marketing, HR, Finance

1. Banking Technology
2. Six Sigma (Green Belt)
3. Wealth Management
4. Retail Management

Miscellaneous Training programmes offered are

- Managerial Skills Training
- Leadership Training
- Cross- Cultural Training

Students are involved in Placement Activities, organize Management Events and involved in educational planning.

**Development and expansion plans of the department for the next 5 years**

- Research project in the areas of rural development, Entrepreneurship covering many villages near Salem.
- Organizing MDP for Executives and FDP for Teaching professionals
- Providing Consultancy/Training for industries in and around Salem.

The learning ambience at Sona facilitates the grooming of students into thought leaders and change agents with a Global mindset. At Sona, the students acquire the mind set, skills and competences, necessary to drive the country and the world forward into the next century, in a highly versatile action learning environment.

## **B. Criterion wise Evaluation Report**

### **Criterion I: Curricular Aspects**

#### **1.1 Curriculum Design and Development**

##### **1.1.1 State the vision and mission of the institution.**

###### **Vision Statement**

To become an institute of great repute, in the fields of Science, Applied Science, Engineering, Technology and Management studies, by offering a full range of programmes of global standard, to foster research, and to transform the students into globally competent personalities.

###### **Mission Statement**

- To provide Graduate, Post-graduate, Doctoral and other value-added programmes beneficial for the students
- To provide state-of-the-art resources required to achieve excellence in teaching-learning, and supplementary processes
- To provide Faculty and Staff with the required qualification and competence and to provide opportunity to upgrade their knowledge and skills
- To motivate the students to pursue higher education, competitive exams, and other value added programmes for their holistic development
- To provide opportunity to the students to bring out their inherent talent
- To establish Centres of excellence in the emerging areas of research
- To have regular interaction with the Industries in the area of R & D, and offer consultancy, training and testing services
- To offer Continuing education, and Non-formal vocational education programmes beneficial to the society



### **1.1.2 What are the goals and objectives of the institution? How are they made known to the various stakeholders?**

- By administering and managing the research activities through centre for excellences on various research specialization as necessary for the advancement of the objectives of the College and undertaking research in various areas.
- Providing for instruction, training and research in various branches of knowledge pertaining to Engineering, Science and Technology and Management.
- Conducting innovative experiments in order to achieve high standard of education, research and training.
- By prescribing courses and curriculum and using methodologies for good delivery of the learning.
- Developing and maintaining relationships with industry experts, faculty members and researchers from other institutions.
- Regulating the expenditure.
- Receiving funds from Industry, National and International Organizations.
- Developing Infrastructure to facilitate high class learning.
- Admitting international students for various courses as per regulations  
Through Websites, brochures, academic calendars and news papers are made known to the stake holders.

### **1.1.3 How are the institutional goals translated into the academic programmes, research and extension activities of the institution?**

The institution has a system of organization and governance that facilitates:

- Successful accomplishment of its mission and purposes.
- Delegation of authority and responsibility.
- Adequate support for each organizational Component.

<b>Year</b>	<b>Long Term Plans</b>
1997 to 2001	<ul style="list-style-type: none"> <li>• To increase the number of programmes to six</li> <li>• To increase the intake of students</li> <li>• To create the required Infrastructure facilities and resources</li> </ul>
2001 to 2005	<ul style="list-style-type: none"> <li>• To get Accreditation for the Programmes</li> <li>• To get ISO-Certification</li> <li>• To establish Research Centres in various branches.</li> </ul>
2005 to 2010	<ul style="list-style-type: none"> <li>• To go in for Post Graduate programmes and additional intake in existing programmes</li> <li>• To enhance Institutional Centres of Excellence, to carry out research,</li> <li>• Testing, consultancy, industry-linkages, continuing education, etc.</li> <li>• To elevate the Institution to “AUTONOMOUS” status in 2010</li> </ul>
2013	<ul style="list-style-type: none"> <li>• To Obtain Deemed University Status</li> </ul>

**1.1.4 What are the major considerations addressed by the goals and objectives of the institution? (Intellectual, Academic, Training, access to the Disadvantaged, Equity, Self Development, Community / National Development, Ecology and Environment, Value orientation, Employment, ICT introduction, Global demands, etc.)**

The Governing Council(GC), Academic Council(AC) and Board Of Studies (BOS) govern the ordinances, curriculum, rules and regulations for conduct of Academic programmes and shall continuously monitor the programmes and make appropriate amendments as and when necessary. BOS involves participation from Industry Experts, Academic Peers, and all the faculty

members. After thorough discussion a draft is prepared by the department and presented to the BOS. Then, the proposals are put for consideration at AC level. In addition, inputs from students, alumni and employers are also taken into consideration through curriculum feedback. There is an element of Computer related courses for all the students of all the faculties/ branch of studies (For instance Programming in C), but the degree varies from creating simple awareness to highly technical courses in Computer Science and Engineering and Information Technology and MCA. In addition, Object Oriented Programming and Data structures and algorithms are taught in circuit branches. Engineering Drawing subject is taught using CAD tools. All faculty members and students are expected to give their seminar presentation using MS-Office tools. Non formal education for the community development also functions smoothly to fulfill the societal needs.

**1.1.5 Does the curricula developed / adopted address the needs of the society and have relevance to the regional / national developmental needs?**

A nation for further development requires motivated human resources with necessary technical and social skills along with good character. To address this,

- i) By developing the right technical courses which enhance advancement of the nation, and
- ii) By introducing courses which help student's character development  
By introducing non conventional courses like YOGA and Self Development. Moreover, students are encouraged to take initiatives in

organizing various cultural events to make them better leaders. Further, a student is sensitized to the prevailing situation in a country by giving them opportunity of seeing nearby organizations where people from weaker sections of societies are given necessary services. On the whole the College strives to ensure that not only technocrat is developed but a complete human being with good civic sense and healthy mind is developed. A Strong youth of today is going to be partner to the development of India's future. In the College, it is mandatory for students to go in rural camp and motivate the rural people about their education and personal development through NCC, NSS and YRC etc.

**1.1.6 What percentage of the courses focus on experiential learning, including practical and work experience for overall development of students and what measures have been taken in the curriculum design?**

The experiential learning and hands-on practical courses are a major component of all the branches in the College. In all branches around 40 - 45% of courses are practical oriented (including project internship). There is also Industrial training, Industrial visits and project internship at reputed organizations make them capable to work in real time industry environment.

**1.1.7 How is employability is ensured through curriculum design? Does the institution focus on multi skill development of students, in the programmes?**

An employer looks for a set of skills, knowledge input and attitude in a person they employ. These are provided during the tenure of a student at the

College by ensuring that the necessary skill set and knowledge inputs are given in a manner that the person can be useful to the employer from day one. In curriculum, placement and training activities are included to enhance the employability of the students. Further, employability is ensured by introducing industrial/ field training and introduction of electives in the programme. The involvement and continuous interaction with industry and academic institutes, for curriculum framing as well as updating the same according to the current trends, helps in absorbing students for summer internship as well as final placement.

**1.1.8 Is there a provision for computer skills to be incorporated in the curriculum for all students?**

Yes. There is an element of computer related courses for the students of all the branches but the degree varies from creating simple awareness to highly technical courses in computer applications. In first year, all undergraduate students are studying Fundamentals of Computer Programming. In addition, all Engineering programmes have included atleast one Programming Language course. For example, Electrical Engineering and Electronics and Communication Engineering students have fundamental computer courses on “Programming in C”, “Object Oriented Programming” and Data Structures and Algorithms. In addition, Mechanical and Civil Engineering students drawing subjects are taught using CAD tools. In all branches students are expected to give their seminar, demonstration and other presentations using MS-Office tools. MBA Program has included a course on Management Information System. In all programs, students are encouraged to use the internet extensively to gain knowledge of recent development in their field.

**1.1.9 List the twinning / collaborative arrangements within and outside the country for various programme offerings.?**

The first twinning programme is arranged with Syracuse University, Newyork City, USA for M.S. Computer Science Programme and research collaborations – for this an MOU was signed between Sona College of Technology and Syracuse University. The second one is with Wayne State University, USA for Mechanical Engineering discipline. In addition, many MOUs are signed with reputed organizations for collaborative works.

**1.1.10 How are the global trends in higher education reflected in the curriculum?**

Introduction of new courses and new UG / PG programmes are based on the global trends and requirements. We also perform periodic revision of curriculam. This is enabled by the constant interaction with Industry experts, Distance Education, Computer Based Training (CBT) packages, EDUSAT, academic peers and reputed institutes with-in state and across India.

**1.1.11 What thrust is given to ‘Information and Communication Technology’ in the curriculum for equipping the students for global competition?**

Improved teaching (presentation, demo etc), evaluation (direct individual feedback), collaboration (group ware, open source projects and exchange on a global scale), online exams and certifications and E-Learning (ease

of access, virtual simulation, independent of time and place, individual interactivity and student centered). This path breaking introduction of Information and Communication Technology perspective argues that continued rapid innovation and excellent growth of this technology will reconcile diverse interests and make students to enable competition to flourish.

**1.1.12 What are the course aiming to promote value education / social citizenship roles?**

Yoga, Meditation, Personality Development and Cyber Security courses are included to promote value education and social citizenship roles. In the curriculum certain weightage is given to include courses like Professional Ethics, Environmental Engineering and Disaster management in all the branches of Engineering and Technology. Cultural education is imparted by making students sensitive to our value system, traditions and culture by various events organized during Cultural Fest conducted for annual day celebrations every year.

**1.1.13 How does the institution involve internal and external academics and experts from industry (employees) / service sector, in the curriculum development process?**

The Academic council organizes Board of Studies meeting every year to review existing curriculum. This involves participation from Industry, Academia, Alumni and all the faculty members.

**1.1.14 Specify the steps undertaken by the institution in the curriculum development process.(Need assessment, development of information database from faculty, students, students, alumni, employees and academic experts, and formalizing the decisions in statutory academic bodies.)**

The Academic Council of the College organizes Board of Studies meeting for the purpose of Curriculum Development every year to review existing curriculum. After thorough discussion a draft is prepared by the department and presented to the Boards of Studies. Then, the recommendations are put for consideration at Academic Council level. Inputs from students, alumni and employers are also taken into consideration through curriculum feedback.

**1.1.15 How do Boards of studies ensure the currency and relevance of the programme offerings?**

Board of studies comprises of experts from industry, employers, research organizations and Academia. They discuss the currency and relevance of the programme being offered. They also discuss suggestions given by students, alumni and industry experts and take appropriate decision and finally approve the curriculum.

**1.1.16 Are Women's issues incorporated in the curricula? If yes, what are the initiatives taken to introduce women –related issues / topics in the curriculum?**

In all the branches of Engineering, Management courses are introduced with certain credits. The syllabus includes a focus on gender issues.



## **1.2 Academic Flexibility**

### **1.2.1 What is the range of programme options available to learners in terms of degrees, Certificates and Diplomas? Give the cut off percentages for admission at the entry level.?**

The College offers 30 programmes (UG, PG and Ph.D.) in the fields of Engineering, Management and Computer Applications. Admission to all programs will be required to satisfy the conditions of admission prescribed by Anna University of Technology, Coimbatore and Government of Tamilnadu prevailing at the time of admission.

### **1.2.2 Does the institution offer any self –financing programmes in the institution ?List them.?**

Yes. The College offers self- financing programme in B.E. (CSE/Civil/ECE/EEE/Mech), B.Tech (IT, TT), M.E. (CS, CSE, ED, PDD, PED, PSE, SE and VLSI), MCA and MBA.

### **1.2.3 How does the institution provide for flexibility in the use of a) Core options b) Elective options c) Supportive courses d) Allied courses e) Any other.**

Yes. The College provides Core, Allied, Supportive and Elective course options.

### **1.2.4 Does the institution provide flexibility for combining the conventional and distance mode of education for students;seek the combination of courses they are interested in.?**

No. The College provides only conventional model of education.

**1.2.5 Does the institution provide flexibility to students to move from one discipline to the other/ give details.?**

No. Since students are admitted to a particular discipline at the time of admission (admission procedure is prescribed by Govt. of Tamilnadu).

**1.2.6 Does the institution provide flexibility to pursue the programme with reference to the time frame (flexible time for completion)?**

Yes, the College provides flexibility to pursue the program with flexibility of time frame (break of study and withdrawal from studies).

**1.2.7 Does the institution have any provision for slow and disadvantaged learners? Give details.**

There is a provision for corrective examinations for slow learners. Faculty members pay more attention in laboratory and provide special coaching and counseling to slow learners.

**1.2.8 How does the institution identify slow and advanced learners? Explain how additional help is provided to the slow learners to cope with the programme? How are the advanced learners facilitated to meet the challenges?**

The College has provision of student assessment by weekly tests and model examinations (Continuous Internal Assessment) through which faculties can identify slow and advanced learners. The faculty members encourage

students' interaction, classroom discussion and conduct quizzes to identify slow and advanced learners.

To improve the performance of slow learners periodic monitoring, regular counseling and additional practices in examination-centered tests are carried out. In addition, parents' meeting is conducted and their wards performance will be discussed.

Various programmes on advanced courses are organized during vacation and holidays to encourage advanced learners. The students also get opportunity to participate in several national and international level technical events.

**1.2.9 What are the options available for students to take additional/ supplementary / enrichment courses along with their regular curriculum (Eg.Degree + a Certificate: P.G degree + a diploma)**

Students are encouraged in participating Professional society and Association activities by the department. Various programmes are organized through the centre of Continuing Education (IBM -RAD, DB2 and blue scholar certification, Oracle, PCB, VLSI and CAD/CAM courses) and the students are motivated to take up these courses. Corporate experts / Entrepreneurs are invited to give Special Lectures and Technical Talks. Students are encouraged to take up Industrial Training/Visits, Project internship at reputed organizations. In addition, the students are given opportunity to involve in the research activities of various Centers of Excellence in different disciplines established by the Institution.

**1.2.10 What value added courses are introduced which would develop skills, offer career Training and promote community orientation?**

**Development skills:** Computer Science and Engineering and Information Technology departments have included Dot Net Technology and Java Programming courses. Electronics and Communication Engineering department has included courses like VLSI and ASIC design. Mechanical and Civil Engineering departments have included CAD/CAM course. Management Programme has included a course in communication and interpersonal development skills.

**Career training:** Industry training, Certified courses like CISCO and Oracle Certification, IBM RAD certification Technical programs and soft skill development programme by Infosys and exclusive Placement and Training activities.

**Promote community orientation:** Management related courses offered in all Programmes. They sensitize students with the Community needs.

Short-term non-formal and vocational programmes are organized to impart specific skills like Ecological awareness programmes, Entrepreneurship development programmes and social welfare camps through various clubs. Training programmes are offered in the areas of Engineering, Technology, crafts and Fine arts, Languages and Management.

**1.2.11 Does the institution provide faculties for credit transfer, if the students migrate from one institution to another within or outside the country?**

No.

**1.2.12 State the curricular design and model adopted by the college in the organization of its curricula. Does the institution follow annual system, Trimester System, Choice Based Credit System (CBCS) or Semester system? Give details:**

The Academic Council of the College organizes Board of Studies meeting once in a year and a curriculum development workshop through which formulation and revision of curriculum is carried out.

Semester and credit system for all B.E. /B.Tech., M.E., MCA and MBA programmes is followed.

**1.3 Feedback Mechanism**

**1.3.1 How does the college obtain feedback from;**

- a) students**
  - b) alumni**
  - c) employers / industries**
  - d) community**
  - e) academic peers**
- 
- All the students
  - **Alumni:** Every year, the College organizes alumni meeting in which feedback is taken. They are also member of Board of Studies. In the Institution website an option is available for giving online feedback.
  - **Employer/ Industries:** Curriculum development workshop is organized, in which employers are invited. Their feedback is taken during these interactions. Board of studies of each faculty or department has an industry expert as member and feedback is obtained during these interactions. Regular interaction with industry experts by either sending

faculty at their location or by inviting them at university for delivering expert talk. During industrial visit and internship feedback is sought from participating companies.

- **Community:** Parent – Teachers’ meet is organized at regular intervals. Parents give their feedback during these interactions.
- **Academic peers:** Board of studies of each faculty or department has an academic peer as member. Through regular interaction with academic peers when they visit the University as an examiner and other purposes.

### **1.3.2 How are the feedbacks segregated, analysed and suggestions incorporated for improvement of the academic and administrative activities?**

Board of Studies discusses all feedbacks and after that necessary decisions and recommendations are made for further improvement.

### **1.3.3 What are the initiatives taken by the faculty in the curriculum revision based on the feedback from the stakeholders?**

Students’ feedback is obtained every semester, in order to implement innovative teaching methods in the curriculum. Parents are invited to attend parents’ meeting (organized once in a semester) and counseling sessions and other functions. During these interactions feedback is collected from them and also from employers, alumni and Industries for further improvement.

## **1.4 Curriculum update**

As the institution conferred autonomous status during the academic year 2010-11 and affiliated to University previously. There is a significant

technological change in last five years in India and the World. To keep pace with such changes, through review and change in syllabus of almost all programmes will be implemented.

**1.4.1 What is the frequency of syllabus revision?**

Once in two years.

**1.4.2 How long does it take to introduce a new programme of study after it has been conceptualized?**

One year.

**1.4.3 What is the Composition of the Board of Studies? Specify PG and UG representation in the BOS, if there is only one BOS for both?**

The Board of Studies constitutes

- Head of the Department as the Chairman
- All Professors
- Two Assistant Professors (By Rotation )
- Two Lecturers (By Rotation)
- Two Experts to be co-opted from outside the University
- Student representatives

In PG, the representation covers faculty members with various specializations (one professor, Assistant professors and Lecturers) and for UG senior professors, Assistant professor and senior lecturers are the members for BOS.

**1.4.4 Does the institution use the UGC guidelines for developing or restructuring the curricula?**

Yes.

**1.4.5 Does the institution refer national and international models for curriculum update?**

Yes.

**1.4.6 What are the interdisciplinary courses introduced during the last five years?**

The interdisciplinary courses introduced during the last five years include Mechatronics, Computer Programming, Environmental Engineering and Engineering Graphics.

**1.4.7 How does the institution ensure that the curriculum bears some thrust on national development?**

A nation. for further development, requires motivated human resources with necessary technical and social skills along with good character. To address this, the Institution works in two specific areas:

- i.** By developing the right technical courses which enhance advancement of the nation, and
- ii.** By introducing courses which help student's character development.

Our College ensures this by introducing non conventional courses like Yoga and Self Development. Moreover, students are encouraged to take initiatives in organizing various cultural events to make them better leaders. Further, a student is sensitized to the prevailing situation in a



country by giving them opportunity of seeing nearby organizations where people from weaker sections of societies are given necessary services.

On the whole, the College strives to ensure that not only technocrat is developed but a complete human being with good civic sense and healthy mind is developed. A Strong youth of today is going to be partner to the development of India's future.

#### **1.4.8 How are the existing courses modified to meet the emerging needs?**

The syllabus of the reputed institutions like IITs, NITs and foreign Universities will be analyzed periodically for improvement of the various programme syllabi. Suggestions from senior academicians, feedback and emerging needs from Industry experts and R&D organizations are included to modify the existing courses.

#### **1.4.9 Which courses have major syllabus revision during the last five years?**

Computer Science and Information Technology related courses have revisions during the last five years.

### **1.5 Best Practices**

#### **1.5.1 What are the quality sustenance and quality enhancement measures undertaken by the institution during the last five years in curricular aspects with reference to curricular design and development / academic flexibility / feedback from stake holders / curriculum update?**

Some of the senior professors are the Board of Studies members in Anna University of Technology, Coimbatore, other universities and autonomous

colleges. They suggested changes in the curriculum and the curriculum was updated accordingly.

**1.5.2 What innovations / best practices in ‘Curricular Aspects’ have been planned / implemented by the institution?**

There is a significant technological change in last five years in India and the World. To keep pace with such changes almost all faculty and staff members training needs are identified and training programmes are either conducted or deputed to other training institutes like NITTTR, IITs and NITs (to name a few Infosys campus connect, EDUSAT programme by Anna University, Chennai and IIT, Bombay, Wipro Mission 10X and NPTEL video lectures). In addition, they can participate in workshops, seminars and conferences in leading institutions. Faculty members are motivated to implement innovative teaching practices.

**1.5.3 What are the initiatives taken to introduce gender related courses / topics in the curriculum?**

In Management programme the curriculum includes a focus on gender issues via courses such as Managerial Values and Business Ethics, Legal aspects of Business and Organizational Behavior. Extra , all the Faculty of Engineering, Technology, Management and Computer Applications adopt AICTE guidelines and UGC guidelines

**1.5.4 What programmes are developed for differently – abled students and how is the same implemented?**

At present there are no such programs being developed.

### **1.5.5 What programmes are available for international students?**

All programmes are open to International students subject to fulfillment of the eligibility criteria.

### **1.5.6 What programmes are developed for adult and continuing education and distance education?**

At present there are no such programs being developed. But the institution has non formal and vocational training centre through which number of programmes are organized. The Institution do not offer distance learning programs.

## Criterion II: Teaching–Learning and Evaluation

### 2.1 Admission Process and Student Profile

#### 2.1.1 How does the institution ensure wide publicity and transparency in the admission process?

- a) **Publishes the Annual Prospectus** : Yes
- b) **Has an active website** : Yes,  
www.sonatech.ac.in
- c) **Advertises in regional / national dailies** : Yes  
(The Hindu, Indian Express, Deccan Chronicle and local Tamil dailies)

#### 2.1.2 How are the students selected for admission to the following courses?

- a) **General** : NA
- b) **Professional** :

For the **BE/BTech** degree courses, 65% of the applicants are allotted seats on the basis of a state-level merit-list and governmental reservation policy. The merit list is compiled by the Government of Tamilnadu, the qualifying marks being computed from the 12<sup>th</sup> Standard Physics, Chemistry and Mathematics marks in a prescribed manner.

The remaining 35% of the applicants are selected according to the guidelines of a ‘Committee to Oversee the Admissions of Professional Colleges in Tamilnadu’ and by using a state-level merit list of the Association of Self-Financing Colleges in Tamilnadu.

For the **ME, MBA** and **MCA** programmes, 50% of the applicants are allotted seats on the basis of a state-level merit list compiled by the Government of Tamilnadu and governmental reservation policy. The

qualifying marks for admission are the scores obtained by the candidates in a state-level common entrance test (TANCET).

The remaining applicants are selected according to the guidelines of the 'Committee to Oversee the Admissions of Professional Colleges in Tamilnadu' and by using a state-level merit list, based on a common entrance test (CET) of the Association of Self-Financing Colleges in Tamilnadu.

All of the admissions are finally verified by the Directorate of Technical Education, Chennai.

c) **Vocational :** NA

### **2.1.3. What strategies are adopted to create equity and access to,**

#### **a) Disadvantaged-community (SC/ST/OBC)**

SC and ST community students are admitted to the extent of 19% of the sanctioned intake using the state-level merit list and according to the directions of the Government of Tamilnadu.

The OBC community, including BC, BC Muslim and MBC-Most Backward Community candidates, is admitted to the extent of 50% of the sanctioned intake using the state-level merit list and according to the directions of the Government of Tamilnadu.

#### **b) Women**

Of the students admitted in the last two years, the percentage of women students is about 45%. Also, to encourage and enhance the admission of

women, a Tuition Fee Waiver Scheme is in place at Sona College; the scheme benefits the top 3% of the admitted women.

**c) Differently-abled Candidates**

Three per cent of the seats are allotted to differently-abled candidates according to the norms of the Government of Tamilnadu. All of those admitted under this category are provided with Management Scholarships that comprises a full or partial tuition fee waiver.

**d) Economically-weaker Sections of the Society**

Candidates coming under the economically weaker sections (backward and most backward communities) are admitted to a maximum of 50% according to Government of Tamilnadu norms, under which the government gives first-graduate-in-the-family incumbents a tuition fee waiver.

The college management also provides a full tuition fee waiver to meritorious students coming under the economically weaker sections of society.

**e) Athletes and Sportspersons**

The government reserves a quota of seats for eminent sportspersons. Sportspersons are also admitted under the management quota and management scholarships to the tune of Rs 8 lakhs are awarded to students excelling in sports and games.

All of the above admissions are finally verified by the Directorate of Technical Education, Chennai for conformity with the policy of Government of Tamilnadu.

#### **2.1.4 What is the ratio of applications received to admissions granted?**

##### **(Demand Ratio)**

##### **Professional courses**

The BE/BTech degree admissions are made from the state-level merit pool by the Government of Tamilnadu under the Single-Window Admission System. From about 1.6 lakh applicants, around 1.2 lakh students are admitted to the engineering colleges in Tamilnadu.

Sona College is one of the 20 most-preferred colleges among about 500 colleges in Tamilnadu, i.e. it is among the top 5%. It can only be inferred from this fact that the demand ratio may be around 25: 1 to 30:1.

A similar preference for the college is observed in the ME, MBA and MCA degree admissions.

The demand ratio for the management quota seats is much lower.

- a) **General courses** : NA
- b) **Vocational courses** : NA
- c) **Other post-graduate courses** : NA
- d) **Other undergraduate courses** : NA
- e) **For all courses** : NA

## **2.2 Catering to Diverse Needs**

### **2.2.1 Is there a provision for assessing students' knowledge / needs and skills before the commencement of the teaching programme?**

The 'normalised' 12<sup>th</sup> Standard marks of applicants to professional programmes compiled by the Tamilnadu Government are a good indicator of the relative knowledge levels of students entering the college. (The 12<sup>th</sup> Standard mathematics, physics and chemistry marks are reduced to 200 marks in a specified manner and the 'cut-off' or qualifying marks are arrived at.)

### **2.2.2 What remedial measures are available for students hailing from the disadvantaged communities?**

Besides the scholarships announced by the government from time to time, the college also provides various categories of scholarships to needy candidates, especially those from the disadvantaged communities.

### **2.2.3 Does the institution provide bridge courses to the educationally-disadvantaged students?**

Yes, a four-week bridge course, including mathematics, physics, chemistry and basic computer programming is organised every year for students entering college with relatively low 'cut-off' marks.

### **2.2.4 What specific strategies are adopted for facilitating slow and advanced learners?**

- a) Special classes are organised to help slow learners cope with challenging subjects.



- b) At tutorial classes, faculty will normally teach only about half the number of students of a regular class; the teachers can thus devote more time for the slow learners to help them overcome learning challenges.
- c) Advanced learners are encouraged to deliver seminars to the class of which they are a part. This provides them with the opportunity of independent learning and thus to learn beyond the syllabus.
- d) Advanced learners and slow learners are also encouraged to participate in peer-coaching, where the former help the latter get a clearer understanding of complex concepts they could not learn well in class.

**2.2.5 Is there a practice of having tutorial classes for the students? If yes, for what courses?**

Yes, especially for the mathematics courses and those having problem-related content.

**2.2.6 Give details of the course by sessions of work assigned and implemented in the tutorial session?**

On an average, 33% of the periods scheduled for specific courses are normally allotted for the tutorial sessions, where the teacher would be coaching only about half the number of students as in a regular class. This allows the teacher more time for coaching students who need personal attention. Tutorials mainly focus on problem solving practice to enhance learning.

**2.2.7 Is there a provision for counsellors / mentors/ advisors for each class or group of students for academic and personal guidance? If yes, specify.**

Yes. Every class of students, irrespective of discipline, year or semester, has a “Class Counsellor” who acts as the Chief Mentor of the class, maintains all records of the students and liaises with them for everything.

Besides this, about 20 students, consisting of a mixed group of good and below-par students, are attached to a faculty, who is their “Faculty Adviser” (FA). An FA will meet with the wards once a fortnight for providing academic and personal guidance and be their ‘counsellor’ for their entire stay on the campus until graduation.

**2.2.8 How is the academic process of each student monitored by the teacher in charge?**

Teachers monitor the academic progress of students on a day-to-day informal basis through regular classroom questions and formally by means of pre-scheduled weekly tests, homework assignments, innovative study assignments, seminars, intensive coaching and model examinations.

**2.2.9 What are the measures taken by the institution to cater to the needs of differently-abled students?**

As stated in Section 2.1.3 above, three per cent of the seats are allotted to. Also, scholarships in the form of fee waivers are provided to the differently-abled persons admitted to the college.

Special physical facilities, like ramps, customised classroom / lab furniture, etc, have also been installed to ensure that the physical ambience for these students is conducive to study.

### **2.3 Teaching–Learning Process**

#### **2.3.1 How does the institution plan and organize the teaching and learning evaluation schedule into the total institutional scheme? Do you have an academic calendar? How is it prepared?**

Meetings with the HODs are called for by the Principal periodically to plan and organise the academic activities and schedule for every semester. The activities include allocation of courses to faculty, organising the development of or procurement of course material including lab manuals, preparation of timetables, weekly tests schedule, test-invigilation schedules, seating pattern for the tests, course planning records of faculty, model exams, last working day, study holidays, etc.

Yes, the institution has an academic calendar. It includes all the major academic activities of individual departments and those of the institution.

The calendar is developed by calling for lists of the major departmental activities scheduled for the year ahead from individual departments and compiling them into one common “Academic Calendar” that also includes major institution-level events, like Annual Day, Sports Day, Hostel Day, Graduation Day, Women’s Day, Founder’s Day, etc.

### **2.3.2 What are the courses, which use predominantly the lecture method?**

**Apart from classroom interactions, what are the other methods of learning experiences provided to students?**

Faculty use the lecture method of teaching most predominantly for the theory courses. The lecture sessions are made interesting by the use of appropriate teaching aids as stated in Section 2.3.4.

Student learning in the theory and lab classes is reinforced by other methods of teaching like demonstration, group discussion, industrial visits, brainstorming, case study, organised quizzes, games, role play, the last two methods especially for management courses.

### **2.3.3 How is ‘learning’ made student-centric? Give a list of the participatory learning activities adopted by the institution, which contribute to self-management of knowledge development and skill formation**

There is an increasing focus in the college to use ‘student-centric’ techniques that provide students the opportunity of developing into independent learners. The overall idea is to ensure that through gradual empowerment student-centred learning focuses on student outcomes rather than on teaching.

The college strongly believes that opportunities of this kind will help them ultimately to engage in life-long learning, an ability that will stand them in good stead in their professional lives.

The common student-centric methods that are used include seminar, industrial visit, in-plant training, innovative mini-projects, main (capstone) project and assignments.

Additionally, as stated in Section 2.3.4 below, other modern techniques to enhance student-centric learning experiences are provided via the EDUSAT lectures, WEBCAST/WEBINAR programmes and Amrita-VIEW lectures. The institution is in the final stages of installing a video-streaming facility by means of a 1.5-Terabyte NPTEL hard disc, consisting of video lectures by experts on a whole range of engineering and technology courses via an intranet that both students and staff can access anywhere on the campus.

**2.3.4 What are the modern teaching aids used in classroom instructions as well as other student learning experiences? How are these used to facilitate modern information / knowledge flow to students?**

The modern teaching aids used are listed below:

- a) Faculty have access to a good number of OHPs (21) and VHPs (34) for use in classrooms or labs.
- b) The college's Learning Resources Development Centre (LRDC called Sonaversity) has come out with around 75 Computer-Based Training/Teaching (CBT) packages for most of the courses of the UG programmes. The CBT packages are used by teachers in the class and by students (at home).

- c) Special expert lectures are beamed to students via the EDUSAT connected with IIT Bombay, the INDO-US satellite program and Anna University, Coimbatore
- d) WEBCAST / WEBINAR programmes in collaboration with Infosys Technologies are used to enhance student learning of topics of current importance.
- e) Amrita's A-VIEW (Virtual Interactive E-learning World) facility: special expert lectures on engineering and technology are presented to student groups in collaboration with IIT-Bombay and Amrita University
- f) Video lecture tapes/CDs/DVDs of lectures by renowned academics from IITs, Harvard University, Stanford University, etc on emerging topics in the areas of engineering, technology and management, which can be used for large groups (in a seminar hall) or for small groups with a CCTV and cordless headphones (in the Central Library itself)

**2.3.5 How do the students and faculty keep pace with the recent developments in the subjects?**

- a) The college encourages the faculty to regularly update themselves in the subjects they normally teach through liberal financial support that staff development activities will entail.

A good number of AICTE/Anna-University sponsored Staff Development Programmes, conferences, seminars and guest lectures in various disciplines of study are organised on the campus and other colleges; these programmes are a great opportunity that the faculty rarely miss.

The campus has an intranet facility that has high-bandwidth internet connectivity and the faculty have easy access to computers in their own departments. The internet is a vital avenue for subject updating frequently used by all faculty.

Faculty also benefit from the expert lectures available on the campus via EDUSAT and A-VIEW. They can also listen in to experienced professors expatiate on the recent developments in their subjects by logging on to the NPTEL video-streaming facility that is on the verge of being commissioned.

- b) The students are able to keep abreast with recent technological developments in the subjects they learn through topics of emerging importance taught to them in class as topics ‘beyond the syllabus’. Other ways include the student-centred methods mentioned above, e.g. class seminars, the EDUSAT and A-VIEW lectures, etc.

Guest lectures by invited industry experts and inter-college student symposia are organised frequently for the benefit of the student. They also gain from the conferences organised by the college.

The students have access to internet in the Central and PG libraries from 8.00 am to 8.00 pm on week days and up to 5.00 pm on Sundays.

### **2.3.6 Are there departmental libraries for the use of faculty and students?**

**Give details.**

Every department in the college has its own library that has in stock textbooks, reference books, CDs and back volumes of journals. It also has

reading facilities, computers with internet connectivity and in some cases a CCTV. These libraries are relatively smaller than the Central Library, but due to their proximity and quick access, are used by both faculty and students.

**2.3.7 Does the library have INFLIBNET / DELNET facility? What percentage of the faculty uses these facilities?**

The Central Library of the college is a member of DELNET since 2001 and 212 books have been borrowed via this facility during the last nine years.

Over the years since 2001, the library has considerably enhanced its resources with reference books and journals (Vide following section). Therefore, at present, only about five per cent of the faculty use the DELNET services.

The college has also lent 87 books under this facility to requesting member-colleges since 2005.

**2.3.8 Does the library have a comprehensive collection of books and journals for all departments?**

The library has a vast collection of learning and reference resources that more than meet the needs of all the departments in the college.



S.No	Resource	No. of Titles	No. of Volumes
1	Textbooks	12.182	50,911
2	General Books	4697	6490
3	Reference Books	2462	2731
4	International Journals	110	Total no. of back volumes - 1983
5	National Journals	128	
6	General Magazines	50	-
7	CDs / DVDs	2255	-
8	Databases CMIE – “Prowess”		
9	Online Journals – IEL, ACM, ASME		
10	AV Resources – NPTEL video lectures		

**2.3.9 What are the various teaching – learning methods (lecture method interactive method, project-based learning, computer-assisted learning, experiential learning, seminars and others), used by the teachers for various subjects.**

As mentioned in Section 2.3.2, teachers use the lecture method for most of the theory courses; other methods of teaching are also used, e.g. demonstration, group discussion, industrial (field) visits, brainstorming, case study, organised quizzes, management games and role play, the last two methods especially for management courses.

Student-centred methods, where the teacher shares the control of learning with the student, like seminar, mini/industrial projects, internship in industry, etc. are increasingly being used.

## 2.4 Teacher Quality

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

Faculty strength	283
Sanctioned faculty strength	266
Faculty from other states	5

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

The process for the selection of faculty members is as follows:

- a) Applications for faculty vacancies or new positions are called for through newspaper advertisements. The curriculum vitae of prospective candidates are also downloaded from reputed internet job sites.
- b) The CVs are scrutinised and the suitable candidates meeting prescribed requirements of qualifications and experience are short-listed and called for interview.
- c) The candidates are screened by an interview panel, consisting of senior staff members from the departments concerned, and if need be, outside external experts.
- d) The candidates selected by the panel are interviewed by the Principal.
- e) Based on the recommendations of the Principal and HOD, the final recruitment is approved by the Secretary.

**2.4.3 Does the college have the required number of qualified and competent teachers to handle all the courses for all departments? If not, how do you cope with the requirements?**

Yes. Our college has the required number of qualified and competent teachers. The Principal calls upon the HODs, usually at a meeting with them well before the start of a new semester, to requisition the HR Department for any vacancies that may need to be filled. So most of the time, the required faculty are always on the rolls.

**2.4.4 Do you appoint substitutes/ additional faculty to teach existing and new programmes? How many such appointments were made during the last year?**

The institution does not appoint any substitute / additional faculty to teach existing and new programmes, as steps are usually taken well in advance of any kind of faculty requirement.

The teaching-learning process is reinforced for some essential and elective courses with lectures by invited industry personnel or experienced academics specialised in the subject.

**2.4.5 What percentage of the teachers has completed UGC, CSIR, NET and SLET exams?**

Four faculty have completed the SLET exams.

**2.4.6 What efforts are made by the management to promote teacher development? (E.g. research grants, study leave, deputation to national/ international conferences / seminars, in-service training, organizing national/ international conferences etc.)**

The college is strongly committed to faculty development and motivates the faculty to update / upgrade themselves through the following ways:

- a) Providing financial assistance to participate in national / international conferences, seminars, workshops, FDPs, SDPs or any other programmes organized by AICTE / ISTE etc.
- b) Providing special incentives for faculty involved in research and those successful in obtaining research grants
- c) Permitting faculty to pursue higher studies by granting them sabbatical leave, in some special cases with pay
- d) Nominating faculty members for the in-house pedagogy training programmes organised by the HR Department at least once a year.
- e) Providing an exclusive officer to help faculty / individual departments to coordinate the task of preparing the attachments/documents to be sent along with the applications to external authorities for various types of grants, to check and despatch them, and also to follow them up.

## 2.4.7 What are the teaching innovations made during the last five years?

### How are innovations rewarded?

- a) **Computer-Based Teaching (CBT) Packages:** As mentioned earlier in Section 2.3.4 (b), the college develops a whole range of CBT packages that includes an illustrative textbook and a CD-ROM per course at its LRDC Sonaversity, established in 1999-2000.

The CD has 2D or 3D animated and / or video versions of engineering concepts that are normally a challenge for the teacher to teach by traditional methods. Use of these CDs in the classroom by the teachers makes for easy comprehension of the concepts by students, who can also use their personal copies of the CD to reinforce learning at home.

Faculty involved in the development of CBT packages are rewarded by appropriate remuneration for their contributions.

The CBT packages are in good demand in many other engineering colleges in Tamilnadu.

- b) **Classroom Quizzes:** Used occasionally by some teachers at Sona College as a break in the regular classroom routine, quizzes raise student enthusiasm and bring in a competitive ambience while enhancing student learning of topics from a course taught by the teacher.
- c) **Team Teaching:** This is another technique used at the college especially for on-the-job training of young teachers to help them gain experience and

confidence in teaching. In team teaching a young teacher is teamed up with an experienced teacher and they teach the same class together, sharing the topics to be taught. The senior teacher provides personal feedback on the young teacher's performance after the class to encourage improvement in teaching skills.

**d) Lab Class Viva:** This method is used in some lab courses to ensure timely (same day) learning of the underlying principle and significance of the experiments performed. Oral examination of individual students is not possible at the end of lab classes due to want of time. To obviate this, students are given previously prepared printed versions of short-answer questions on the day's experiment that are typical of practical viva questions, and they are asked to answer them after completing the experiment. Written feedback on their learning is provided to the students at the start of the next lab class and the method is repeated class after class, the questions asked thus forming a bank of viva questions over time.

#### **2.4.8 Does the institution have representation of women among the staff?**

##### **What percentage?**

The college recruits the most competent staff irrespective of gender considerations. At the present time there is a good representation of women to the extent of 45% of the total staff strength.

#### **2.4.9 List the faculty who have been recognized for excellence in teaching during the last five years?**

The college recognises teaching excellence of its faculty annually at a Teacher Awards Day function, where faculty who have produced 100 %

and above-90% pass results in the courses they have taught in the past academic year are awarded appropriate cash awards and certificates.

In the last five years, nearly 1000 faculty members have been recognised for teaching excellence, besides outstanding performances in other areas of college and academic activity.

**2.4.10 List the faculty who have undergone staff development programmes during the last five years (refresher courses, orientation programmes and staff training conducted by the university and other institutions)**

The lists of faculty who have been trained department-wise over the last five years are given in the tables that follow.

**MECHANICAL ENGINEERING**

<b>Year 2009-2010</b>		
<b>S.No</b>	<b>Name of the Faculty</b>	<b>Programme Attended</b>
1.	Mr.R.Viswanathan	One Day Training Programme – Rapid Prototyping
2.	Mr.R.Viswanathan	Short Term Training Programme - Rapid Product Development
3.	Mr.R.Sasikumar	Two day course on Testing and characterization of Materials
<b>Year 2008-2009</b>		
1.	Dr.R.M Arunachalam	Research Update
2.	Prof.J.S.Senthilkumar	Short term training programme on 'Advanced Engineering Optimization Through Intelligent Techniques'

<b>S.No</b>	<b>Name of the Faculty</b>	<b>Programme Attended</b>
3.	Mr.R.Sasikumar	SDP on 'Micro and Nano technology for power generation and energy conversion application'
4.	Mr.N.Ravikumar	SDP on 'CAD & FEM'
5.	Mr.S.Lakshmanakumar	SDP on 'CAD & FEM'
6.	Dr.R.M Arunachalam	Short term course on 'Electron Microscopy'
7.	Mr.R.Sasikumar	Short term course on 'Electron Microscopy'
8.	Prof.S.Dharmalingam	Short term course on 'Electron Microscopy'
<b>Year 2007-2008</b>		
1.	Dr.R.M Arunachalam	Short term course on 'Micromachining'
2.	Mr.N.Ravikumar	FDP on 'Vibration and Noise Control'
3.	Mr.A.Sivapragasam	Pedagogy Training Programme
4.	Mr.A.Jegan	Pedagogy Training Programme
5.	Mr.R.Sasikumar	course on 'Introduction to Micro manufacturing Technoloies'
6.	Prof.S.Dharmalingam	SDP on 'Finite Element Analysis'
<b>Year 2006-2007</b>		
1.	Mr.V.M.Madhavan	CSI College of Engg. Ketti.
2.	Mr.V.M.Madhavan	Seminar on 'Renewable Energy Today and Tomorrow'
3.	Mr.V.M.Madhavan	One day Awareness Programme on 'Renewable Energy Sources'



<b>S.No</b>	<b>Name of the Faculty</b>	<b>Programme Attended</b>
4.	Mr.A.Jegan	One day Awareness Programme on 'Renewable Energy Sources'
5.	Dr.R.M Arunachalam	Short term training programme on 'Advanced Manufacturing and Metrology'
6.	Mr.R.Sasikumar	FDP on 'Quantitative techniques for Research in Engg. And management
7.	Mr.N.Mohanasundararaju	FDP on 'Quantitative techniques for Research in Engg. And Management'
<b>Year 2005-2006</b>		
1.	Prof.N.Sundaramoorthy	Course on Engineering Thermodynamics
2.	Prof.A.Selvaraj	Short Term Course on 'Introduction to Industrial Vibration Problems and their Solutions'
3.	Dr.R.M Arunachalam	Patent awareness
4.	Prof.N.Elango	FDP on CAD / CAE / CAM and IT in 'Product Development and Discrete Manufacturing'
5.	Prof.N.Sundaramoorthy	FDP on Heat and mass transfer
6.	Prof.P..Marimuthu	Training Programme on 'Lean Manufacturing'

### **ELECTRICAL AND ELECTRONICS ENGINEERING**

<b>S.No</b>	<b>Name of the Faculty</b>	<b>Programme Attended</b>
1.	Prof. M.Senthil Kumar	IEEE Faculty development program on software tools for simulation and analysis of power system
2.	Dr.S.Poorani	Challenges in Smart grid Renewable resources
3.	Mr. K. S.Sriraj Kumar	Pedagogy Training Program, Sona College of Technology

<b>S.No</b>	<b>Name of the Faculty</b>	<b>Programme Attended</b>
4.	Mr. V. Shanmuga Sundaram	Pedagogy Training Program, Sona College of Technology
<b>Year 2008-2009</b>		
1.	Prof.M.Senthil Kumar	Indo – US training program
2.	Prof. R.Shiva kumar	Indo – US Training program
<b>Year 2007-2008</b>		
1.	Mr.G.Saravanan	Pedagogy Training Program, Sona College of Technology
2.	Mr.G.Suresh	Pedagogy Training Program, Sona College of Technology
3.	Mr.R.Satheesh Kumar	Pedagogy Training Program, Sona College of Technology
<b>Year 2006-2007</b>		
1.	Mr.B.Karthik	Pedagogy Training Program, Sona College of Technology
2.	Mr.G. Karthikeyan	Pedagogy Training Program, Sona College of Technology
3.	Mrs. M. Gopila	Pedagogy Training Program, Sona College of Technology
4.	Mrs. C.Santhana Lakshmi	Pedagogy Training Program, Sona College of Technology
5.	Mrs. V. Lavanya	Pedagogy Training Program, Sona College of Technology

## ELECTRONICS AND COMMUNICATION ENGINEERING (UG)

Year 2010-2011		
S.No.	Name of the Faculty	Programme Attended
1.	Dr.R.S.Sabeenian and Palanisamy V	International Journal of Computer Science and Applications (ISSN No. 0974-0767)
2.	Dr.R.S.Sabeenian and Paramasivam.M.E	Second National Conference on Signal Processing, Communications and VLSI Design (NCSCV'10)
3.	Ms.M.Anbuselvi	National conference on Folded FIR filter based on pipelined array Multiplex.
4.	Prof.R.Vinod kumar	International Journal for Computer Application's
5.	Ms.K.Vidhya	National conference on FPGA based fault detection and fault diagnosis in SRAM
6.	Mr.A.Ayub Khan	National conference on Segmentation of ultra sound images using modified star kalman algorithm
7.	Mr.A.Ayub Khan	National conference on Segmentation of blood vessels using spokes ellipse algorithm

<b>S.No.</b>	<b>Name of the Faculty</b>	<b>Programme Attended</b>
8.	Mr.B.Prasad	National conference on Abnormalities in fetal brain
9.	Mr.B.Prasad	National conference on Neural tube and central nervous systems defects in fetal brain
10.	Dr.R.S.Sabeenian and Palanisamy V	International Journal of Signal and Imaging Systems Engineering (IJSISE).Published by Inderscience.
11.	Dr.R.S.Sabeenian and Palanisamy V	International Journal of Information Technology & Knowledge Management (ISSN No. 0973-4414).
12.	Dr.R.S.Sabeenian Palanisamy V	International Journal of Biomedical Engineering and Consumer Health Care Informatics.
13.	Dr.R.S.Sabeenian. and Paramasivam.M.E	International Journal of Biomedical Engineering and Healthcare informatics.
14.	Dr.R.S.Sabeenian, Dr.S.Manickam & Paramasivam.M.E	National Journal of Sona Language Engineering and Science Associate (SonaLesa)
15.	Dr.R.S.Sabeenian and M.E.Paramasivam	EEE International Advance Computing Conference (IACC 2010)

<b>S.No.</b>	<b>Name of the Faculty</b>	<b>Programme Attended</b>
16.	Dr.R.S.Sabeenian and .E.Paramasivam	2010 IEEE International Advance Computing Conference (IACC 2010)
17.	Dr.R.S.Sabeenian and M.E.Paramasivam	IEEE Springer International Conference on Advances in Information and Communication Technologies ICT 2010
18.	Dr.R.S.Sabeenian and P.Sabarinath	Accepted for IEEE International Conference on Advances in Communication, Network and Computing CNC 2010 at
19.	Dr.R.S.Sabeenian and P.M.Dinesh	Accepted for IEEE International Conference on Advances in Communication, Network and Computing CNC 2010
20.	Dr.R.S.Sabeenian and M.Vidhya	Accepted for IEEE Springer International Conference on Advances in Information and Communication
21.	Prof. D.Jayanthi	Presented a paper Design Style For Asynchronous Pipeline Controller on international conference ICICT
22.	Mrs.S.Deepa	Workshop on ESDN laboratory
23.	Mr.A.Ayubkhan	Workshop on ESDN laboratory
24.	M.Senthil Vadivu	Workshop on Bio medical signal processing

<b>Year 2009-2010</b>		
<b>S.No.</b>	<b>Name of the Faculty</b>	<b>Programme Attended</b>
1.	Mr.S.Sree Southry	Workshop on Image processing based on lab view
2.	Prof.R.S.Sabeenian & Dr.V.Palanisamy	International Conference on Bio medical Signal Processing
3.	Prof.R.S.Sabeenian M.E.Paramasivam	International Conference on Bio medical Signal Processing
4.	Mrs. S.Deepa	Workshop on current trends in measurement techniques and MPLS (National)
5.	Mr.N.s.Yoganathan	Staff development programme on CMOS Emerging technologies
6.	Mr.B.Thiyaneswaran	Workshop on image processing and pattern recognition
7.	Mr.J.P.Senthil Kumar	Workshop on Recent trends in high data rate wireless communication
8.	Mrs.K.R.Kavitha	Workshop on The past & future of Integrated Circuit technologies
9.	Prof.M.Sumathi	International Conference on Optics& Photonics
10.	Prof.B.Gopi	Workshop on Semiconductors : Micro to Nano...

<b>S.No.</b>	<b>Name of the Faculty</b>	<b>Programme Attended</b>
11.	Prof.B.Gopi	Workshop on nano science and Technology
12.	Mrs.M.Susaritha	FDP on Induction Training for young teachers
13.	Prof.R.Vinod Kumar	National Conference on A method to Improve the performance of AODV in MANET
14.	Ms.T.Premakumari	National Conference on Multi Threading Techniques for improving error tolerance
15.	Mrs.M.Susaritha	National Conference on Deep Pipe lining for High performance floating point course
16.	Ms.A.P.Jaya Karishna	National Conference on Deduction and Correction of Extraction errors in high performance circuits
17.	Mrs.S.Lavanya	National Conference on FPGA implementation of an Encryption
18.	Dr.M.Sumathi & Mr.R.Pratheep	National Conference on Intensity based Fiber Optic Deflection Sensor
19.	Dr.M.Sumathi & Mr.R.Pratheep	International Conference on Optics and Photonics

<b>S.No.</b>	<b>Name of the Faculty</b>	<b>Programme Attended</b>
20.	Dr.R.S.Sabeenian and Palanisamy V	National Conference on ‘Disease Identification in CT images using MRCSF’
21.	Dr.R.S.Sabeenian and M.E.Paramasivam	National Conference on ‘Fusion of Multi-sensor Medical Images using Discrete Wavelet Transform’
22.	Dr. M.Sumathi and Dr. P.T.Vanathi	International Journal of Communication Networks and Distributed Systems
23.	Dr.R.S.Sabeenian. and Palanisamy V	International Journal of Medical Engineering and Informatics (IJMEI)
24.	Dr.R.S.Sabeenian and Palanisamy V	International Journal of World Academy of Science, Engineering and Technology, WASET(ISSN2070-3740)
25.	Dr.R.S.Sabeenian and Palanisamy V	Published a journal ‘Texture Based Medical Image Classification of Computed Tomography images using MRCSF’ on International conference
26.	Prof.R.Vinod Kumar	International Conference on ICVCom 2009



<b>Year 2008-2009</b>		
<b>S.No.</b>	<b>Name of the Faculty</b>	<b>Programme Attended</b>
1.	Mrs.M.Jamunarani	Staff Development programme
2.	Ms.K.Vidhya	Staff Development programme
3.	Mr.P.Yuvaraj	Staff Development programme
4.	Mrs.D.P.Sangeetha	Staff Development programme
5.	Mr.M.E.Paramasivam	Workshop on System level solution corporation, gujarat
6.	Prof S.Karthigai Lakshmi	Orientation program on research
7.	Prof M.Sumathi	Workshop on Optical Course and network design & Modelling
8.	Ms.T.Premakumari	Workshop on NETFPGA
9.	Prof B.Gopinath	FDP on Altera Technical Training
10.	Prof Vinodkumar	FDP on Research issues in computer networking
11.	Mrs.Karthigai lakshmi	Staff Development programme
12.	Mrs.Chinnammal	Staff Development programme
13.	Mr.N.S.Yoganathan.	Staff Development programme
14.	Ms.Gnanambigai	Staff Development programme

<b>S.No.</b>	<b>Name of the Faculty</b>	<b>Programme Attended</b>
15.	Mr.S.Sreesouthry	Staff Development programme
16.	Mr.K.Anguraj Mr.B.Vidhyapathi	National Seminar on Emerging Trends in Embedded Controller & its applications
17.	Prof.A.Allirani	National Conference on An Energy Sorting Protocol (ESP) with low Energy and Low Latency in Wireless Sensor Network
18.	Mr.N.S.Yoganathan	FDP on Testing of VLSI circuits
19.	Mr.N.S.Yoganathan	National Conference on Rout ability improvemen5rt in VLSI
<b>Year 2007-2008</b>		
1.	Ms.A.Allirani(HOD) Mr.R.S.Sabeenian(AP) Mr.M.E.Paramasivam (RA)	International conf.on advanced Computing Commn
2.	Prof.B.Gopi	Workshop on Research approaches and Research strategy
3.	Prof.B.Gopi	Seminar on Asic design and Verification using system verilog
4.	Mr.K.Anguraj	Staff Development programme
5.	Ms.M.Anbuselvi	FDP on teaching methodology in engineering subjects

<b>S.No.</b>	<b>Name of the Faculty</b>	<b>Programme Attended</b>
6.	Ms.T.Premakumari	FDP on Effective teaching
7.	Ms.T.Premakumari Mrs.D.Jayanthi	Workshop on trends in VLSI and ASIC Designs
8.	Mr.M.E.Paramasivam Mrs.M.Sumathi Mrs.G.Nirmala priya	Workshop on Research approaches & strategy
9.	Mr.K.Anguraj	Workshop on Computer networks
10.	Mr.A.Ayubkhan Mr.B.Prasad	PCB Designing
11.	Mr.J.P.Senthil kumar	Staff Development programme
12.	Mr.B.Thiyaneswaran	Staff Development programme
13.	Mrs.K.R.Kavitha	Staff Development programme
14.	Mrs.D.Jayanthi	FDP on VLSI
15.	Mrs.D.Jayanthi	Workshop on modeling, simulation of digital s/m using HDLs
16.	Mrs.D.Jayanthi	Workshop on Modeling, simulation and synthesis of digital system using HDL
17.	Mrs.G.Nirmala priya	Workshop on 'soft computing'.
18.	Mrs.M.Sumathi	Workshop on Optical fibre communication and networks.

<b>S.No.</b>	<b>Name of the Faculty</b>	<b>Programme Attended</b>
19.	Mr.B.Thiyaneswaran Mr.R.S.Sabeenian	Technical Seminar on MCNE
20.	Mr.A.Ayubkhan Mr.C.Manikandan	Workshop on Modern electronic test & Measuring Equipment
21.	Prof.D.Jayanthi	Workshop onASIC Design and verification using system verilog
22.	Prof.M.Sumathi	Workshop on Oppertunities of Govt. Funded R&D Projects for Engg. Education Institution
23.	Prof.R.S.Sabeenian	Conference on image processing algorithm
<b>Year 2006-2007</b>		
1.	M.Sumathi	International conference on Resource Utilisation, Kongu Engg college, Erode
2.	R.Gowrisankar R.Rameshkumar T.Shanthi C.Punitha Selvi K.Brinda	Workshop on Advanced signal processing
3.	M.Angeline Cynthia	Workshop on Pattern recog & Image Processing

<b>S.No.</b>	<b>Name of the Faculty</b>	<b>Programme Attended</b>
4.	R.Gowrisankar	Workshop on Real time Simulation of DSB-SC Dmod.
5.	Prof.B.Gopi R.Gowrisankar	Workshop on DSP tools & Practice
6.	M.E.Paramasivam	FDP On Wireless N/W
7.	M.Sumathi M.E.Paramasivam	Workshop on Embedded Data communication
8.	M.E.Paramasivam	Workshop on Computer networking
9.	M.E.Paramasivam	Workshop on Computer networking Laboratory
10.	R.S.Sabeenian	Workshop on Computer networking Laboratory
11.	Ms.S.Deepa	Workshop on networks lab
12.	Ms.P.Malini	Workshop on networks lab

## COMPUTER SCIENCE AND ENGINEERING

Year 2006-2010		
S.No	Name of the Faculty	Programme Attended
1.	Dr. M. Usha	<p>Workshop on “Multicore Programming” by INTEL at Bannariamman Institute of Technology</p> <p>ICT-ACT – Oracle Higher Education Initiative for Tamilnadu INDO US Collobration Seminar on “Effective Presentation Skill” Seminar on “Multimedia Computing and its Applications” Seminar on “Changing trends in Digital ERA:e-Resources awareness ”SDP on “Data Mining”</p>
2.	Dr. B. Sathiyabhama	<p>Workshop on Essential Strategies and Tools for research at Sona College of Technology. Workshop on SPSS 17.0</p> <p>Workshop on Theory of Computation</p> <p>Workshop on Thesis Presentation using LaTeX Software Workshop on Computational Models, Tools and Techniques in Bioinformatics</p> <p>SDP on “Data Mining”</p>

<b>S No</b>	<b>Name of the Faculty</b>	<b>Programme Attended</b>
3.	Dr. J. Akilandeswari	<p>Workshop on Mission 10-X by Wipro at Sona College of Technology.</p> <p>Workshop on Thesis Presentation using LaTeX Software</p> <p>ICT-ACT – Oracle Higher Education Initiative for Tamilnadu</p> <p>Workshop on SPSS 17.0</p>
4.	Prof.A.C.Kaladevi	<p>Workshop on “Multicore Programming” by INTEL at Bannariamman Institute of Technology</p> <p>RPP on Information Management</p> <p>SDP on “Research direction on Grid Computing”</p> <p>Pedagogy Training Programme at Sona College of Technology</p>

<b>S No</b>	<b>Name of the Faculty</b>	<b>Programme Attended</b>
5		ISTE Workshop for Effective Teaching and Learning of Computer Programming, at Sona College of Technology,  Workshop on Essential Strategies and Tools for research at Sona College of Technology  Workshop on SPSS 17.0
6	Prof .J. Jayanthi	INDO US Collobration  Workshop on SPSS 17.0  FDP on Trends and Software Testing  Workshop on Essential Strategies and Tools for research at Sona College of Technology  STTP on “Software Quality”
7.	Prof. V. Nandini	Pedagogy Training Programme at Sona College of Technology  SDP on “Data Mining”  Seminar on Bloom’s Taxonomy at Vivekanandha Engineering College.



<b>S No</b>	<b>Name of the Faculty</b>	<b>Programme Attended</b>
8.	Prof.D. Balamurugan	Pedagogy Training Programme at SonaCollege of Technology ISTE Workshop for Effective Teaching and Learning of Computer Programming, at Sona College of Technology
9	Prof.PonHarsha vardhanan	Pedagogy Training Programme at Sona College of Technology
10	Prof.R.C.Narayanan	Pedagogy Training Programme at Sona College of Technology, J2EE And Best Practices in Application Development,at Anna University of Technology, Coimbatore. ISTE Workshop for Effective Teaching and Learning of Computer Programming,at Sona College of Technology National Seminar on Data Mining and Data Warehousing SDP on “Wireless and Mobile Networks” SDP on “Programming in C# & .NET” Workshop on Mission 10-X by WiproatSona College of Technology.  FDP on “Student Psyche”

<b>S No</b>	<b>Name of the Faculty</b>	<b>Programme Attended</b>
11	Mr.A.Prithiviraj	<p>Pedagogy Training Programme at Sona</p> <p>ISTE Workshop for Effective Teaching and Learning of Computer Programming, at Sona College of Technology</p> <p>SDP on “Wireless and Mobile Networks” J2EE And Best Practices in Application Development,at Anna University of Technology, Coimbatore.</p>
12	Ms. R. Subhashini	<p>Short Term Training Program on “Enterprise Resource Planning” at SonaCollege of Technology</p> <p>SDP on “Wireless and Mobile Networks</p> <p>Workshop on “Research Approches and Research Strategies”Seminar on Bloom’s Taxonomy at Vivekanandha Engineering College.Pedagogy Training Programme at Sona College of Technolog</p> <p>SDP on “Data Mining” SDP on “Teaching Learning Process” Workshop on Essential Strategies and Tools for Research at Sona College of Technology</p>

<b>S No</b>	<b>Name of the Faculty</b>	<b>Programme Attended</b>
13	Ms. T. Sathiya	Seminar on “Course Redesign through Blender Learning” STTP on “Software Quality” Pedagogy Training Programme at Sona College of Technology
14.	Ms.K.C.Rajeswari	Seminar on Bloom’s Taxonomy at Vivekanandha Engineering College FDP on “An Overview of Effective Teaching” Pedagogy Training Programme at Sona College of Technology
15.	Ms. S. Anitha Elavaras	Insight’09 SDP on “Data Mining” Pedagogy Training Programme at Sona College of Technology
16.	Ms.S.Lavanya	FDP on Computer Architecture
17.	Ms.A.K.Ilavarasi	Workshop on “Multicore Programming” by INTEL at Bannariamman Institute of Technology

<b>S No</b>	<b>Name of the Faculty</b>	<b>Programme Attended</b>
18.	Mr.P.S.Prakash	Pedagogy Training Programme at Sona College of Technology
19.	Mr.J.Dhayanithi	Pedagogy Training Programme at Sona College of Technology.ISTE Workshop for Effective Teaching and Learning of Computer Programming, at Sona College of TechnologySDP on Empowering Teachers for Enhancing SC/ST Students Employability
20.	Mr.B.Galeebathullah	Workshop on “Multicore Programming” by INTEL at Bannari Amman Institute of Technology
21	Ms.T.Yuvarani	Pedagogy Training Programme at Sona College of Technology.ISTE Workshop for “Effective Teaching and Learning of Computer Programming”, at Sona College of Technology

S No	Name of the Faculty	Programme Attended
22.	Ms.P.Ramya	<p>Short Term Training Program on “Enterprise Resource Planning” at Sona College of Technology.</p> <p>J2EE And Best Practices in Application Development,at Sona College of Technology.</p> <p>ISTE Workshop for Effective Teaching and Learning of Computer Programming, at Sona College of Technology</p> <p>FDP on Computer Architecture</p> <p>FDP on “An overview of Effective Teaching”</p> <p>Pedagogy Training Programme at Sona College of Technology</p>

## INFORMATION TECHNOLOGY

<b>Year 2009-2010</b>		
<b>S. No</b>	<b>Name of the Faculty</b>	<b>Programme Attended</b>
1.	Mr.K.Thangaraj Lecturer	Wireless and Mobile Networks
2.	Mr.N.Sampath Kumar Sr. Lecturer	Entrepreneurship
3.	Mr. K. Karthick, RA	FOSS
4.	Mr.P.Shanmugaraja. Asst. Professor	Leveraging Technology for Effective Teaching in the Classroom and Beyond
5.	Mr.J.L.AldoStalin Lecturer	Theory of Computation
6.	Mr. M. Venkatesh  Tr. Lecturer  Ms. C. Kavitha –  Tr. Lecturer.	Pedagogical Training Programme
7.	Mr. Aldo Stalin  Lecturer	Deep Dive Faculty Enablement programme
8.	Mr. C. Selvaraj,  Asst. Professor	Mat Lab Training Seminar

<b>S. No</b>	<b>Name of the Faculty</b>	<b>Programme Attended</b>
9.	Mr. M. Senthilkumar Jr. Programmer	Essentials of .NET
10.	Mr.K.Thangaraj, Lecturer	IEI Election Software
<b>Year 2008-2009</b>		
1.	Mr. N. Sampath Kumar, Senior Lecturer	Entrepreneurial Development
2.	Mr. C. Selvaraju, Asst. Professor.	.Net and C#
3.	Mr. R. Rajagopal. Lecture	Best Practices in Software Project Management
4.	Ms. P. Pabitha. Asst. Professor and Ms. P. Indira Priya. Part-Time Lecturer.	Train the Trainer Program on “Web Development using IBM Tools.
5.	Mr. S. David Samuel Azariya, Lecturer	Hands on with ARM: Programming Embedded System
6.	Ms.J. Akilandeswari. Asst. Professor	Thesis preparation using LaTeX Software

<b>S.No</b>	<b>Name of the Faculty</b>	<b>Programme Attended</b>
7.	Ms. J. Velumani. Lecturer Mr. R. Rajagopal. Lecturer Mr. J. Aldo Stalin. Lecturer	Pedagogical Training Programme
8.	Ms. M. Navabarathy. Sr. Lecturer Ms. S.Vijayalakshmi. Lecturer Mr. M. Mailsamy. Lecturer Ms. D. Poorani. Lecturer.	Pedagogical Training Programme
9.	Ms. J. Akilandeswari. Asst. Professor	Introduction to SPSS 17.0
10.	Mr. R. Vinodh Kumar, Network Administrator.	CCNP Training Programme
11.	Mr.Karthick.K. Research Assistant	Hands on with ARM: Programming Embedded System
12.	Mr. S. David Samuel Azariya, Lecturer	Embedded Linux Kernel and Driver Development
13.	Mr. T. Palanisamy. Lecturer/ NSS Programme Officer	Programme Officers Meet and First Aide Training



<b>S No</b>	<b>Name of the Faculty</b>	<b>Programme Attended</b>
14.	Mr. S. David Samuel Azariya, Lecturer. Mr. P. Iyyanar, Lecturer.	Programming with Python
15.	Mr. S. David Samuel Azariya, Lecturer. Mr. P. Iyyanar, Lecturer.	MySQL on Linux
16.	Mr. S. David Samuel Azariya, Lecturer. Mr. P. Iyyanar, Lecturer.	Programming with PHP
17.	Mr.S.DavidSamuelAzariy, Lecturer. Mr. P. Iyyanar, Lecturer.	Programming with PHP
18.	Mr. M. Venkatesh. Tr. Lecturer	Web Services & SOA
<b>Year 2007-2008</b>		
1.	Ms. D. Jamuna Devi. Sr. Lecturer	VLSI Design

S No	Name of the Faculty	Programme Attended
2.	<p>Ms. R. Lavanya. Lecturer.</p> <p>Ms. M. Farhana Mobin. Lecturer.</p> <p>Ms. G. Jayakokila. Lecturer.</p>	Pedagogical Training Programme
3.	<p>Ms. S. Rama. Lecturer.</p> <p>Ms. R. Selvarani. Lecturer.</p> <p>Mr. T. Palanisamy. Lecturer.</p>	Pedagogical Training Programme
4.	Mr. N. Sampath Kumar	Management Training Programme on “Managerial Effectiveness Competencies”
5.	Mr. R. Vinodh Kumar, Network Administrator	DCNE (Dax Certified Network Engineer) Training - Comprehensive Technical Training on “Switching and Routing”

Year 2006-2007		
S No	Name of the Faculty	Programme Attended
1.	Prof. B. Saravanan	Management of Engineering Colleges for Quality Education
2.	Prof. S. R. Chickerur. Prof. S. Sakthivel.	Neural Networks
3.	Prof. K. V. Shanthi. Prof. S. Vasanthi	Computer Organisation & Architecture
4.	Mr. P. Iyyanar Ms. S. Shobhana Devi Ms. M. Farhana Mobin	Pedagogical Training
5.	Ms. M. Amutha, Lecturer	Over view on effective teaching
6.	Mr. Madhavan. P	Teaching Methodology in Engineering Subjects
7.	Ms. R. Lavanya Ms. I. Vishnu Suba Ms. R. C. Geeta Ms. S. Rama Ms. S. Sathiya Priya Ms.M.G. Vijayalakshmi	Objective based instruction in higher education
8.	Mr. T. Palanisamy	Micro Controllers for Embedded and Application

<b>S.No</b>	<b>Name of the Faculty</b>	<b>Programme Attended</b>
9.	Prof. P. Shanmugaraja	Infosys Campus Connect Regional meet
10.	Prof. G. Prakash	Program on TTT – (Train the Trainer) on topic “Project Management”
11.	Prof. B. Saravanan Mr. P. Madhavan	Desktop Moksha Training

### **CIVIL ENGINEERING**

<b>Year 2009-2010</b>		
<b>S.No</b>	<b>Name of the Faculty</b>	<b>Programme Attended</b>
1.	Prof. M. N. Sivashanmugam	Traffic Engineering and Management (June 2009) College of Engineering, Anna University, Chennai
2.	Prof.A.Murugesan	Design of Steel Structures (June 2009) College of Engineering, Anna University, Chennai
3.	Dr.Vyshali	Introduction to ArcGIS II (Aug 2009) ESRI, New Delhi
4.	Ms.N.Thilagavathi	Introduction to ArcGIS II (Aug 2009) ESRI, New Delhi

<b>S.No</b>	<b>Name of the Faculty</b>	<b>Programme Attended</b>
5.	Ms.N.Thilagavathi	Computer Applications in Modern Electronic Surveying (Oct 2009) Government College of Engineering, Salem
6.	Prof.A.Murugesan	Refresher Course on IS 800-2007 (Nov 2009) Thiagarajar Polytechnic College, Salem
7.	Ms.R.S.Gandhimathi	Refresher Course on IS 800-2007 (Nov 2009) Thiagarajar Polytechnic College, Salem
8.	Mr.S.Thitumurugan	Refresher Course on IS 800-2007 (Nov 2009) Thiagarajar Polytechnic College, Salem
9.	Mr.J.Vikram	Refresher Course on IS 800-2007 (Nov 2009) Thiagarajar Polytechnic College, Salem
10.	Dr.Vyshali	Effective Teaching Methodologies – Statics (May 2010) National Institute of Technology Karnataka, Surathkal

<b>S No</b>	<b>Name of the Faculty</b>	<b>Programme Attended</b>
11.	Prof.A.Murugesan	STAAD.Pro, SAP, ETABS, Primavera, MS Project & other Applications in Civil Engineering (May 2010) CIT – Coimbatore.
12.	Dr.S.Suresh	Geographic Information System (GIS) Jayam College of Engineering, Dharmapuri (July 2010)
13.	Ms.N.Thilagavathi	MISSION 10X Sona College of Technology
<b>Year 2008-2009</b>		
1.	Prof.A.Murugesan	Modern Surveying (Total Station & GPS) (July 2008) National Institute of Technical Teachers Training & Research, Chennai
2.	Ms.N.Thilagavathi	Modern Surveying (Total Station & GPS) (July 2008) National Institute of Technical Teachers Training & Research, Chennai
3.	Ms.A.Gulshan Taj	Disaster Management and Earthquake Resistant Structures (July 2008) National Institute of Technical Teachers Training & Research, Chennai

<b>S No</b>	<b>Name of the Faculty</b>	<b>Programme Attended</b>
4.	Prof.P.M.Shanmuga Vadivu	Modern Construction Materials and Techniques (Aug2008) National Institute of Technical Teachers Training & Research, Chennai
5.	Ms.K.Vidhya	Modern Construction Materials and Techniques (Aug 2008) National Institute of Technical Teachers Training & Research, Chennai
6.	Dr.Vyshali	Geoinformatics for Integrated Coastal Zone Management (Jan 2009) National Institute of Technology Karnataka, Surathkal
7.	Ms.A.Gulshan Taj	Limit State Design of Steel Structures using IS: 800 – 2007 (Feb 2009) Government College of Engineering, Salem
8.	Prof.A.Murugesan	Disaster Resistant Structural Design (Feb 2009) College of Engineering, Anna University, Chennai
9.	Prof.P.M.Shanmuga vadivu	Design of Steel Structures – Limit State Method IS 800 – 2007 (May 2009) Kongu Engineering College, Erode

<b>S No</b>	<b>Name of the Faculty</b>	<b>Programme Attended</b>
<b>Year 2007-2008</b>		
1.	Prof.A.Murugesan	Basics of Dynamics and Aseismic Design (June 2007) Kongu Engineering College, Erode
2.	Ms.M.Thanmanaselvi	Geographic Information System (July 2007) National Institute of Technical Teachers Training & Research, Chennai
3.	Ms.N.Thilagavathi	Remote Sensing Techniques and Applications (Nov 2007) VLB Janaki Ammal College of Engineering and Technology, Coimbatore
<b>Year 2006-2007</b>		
1.	Dr.G.N.Mallikarjuna Rao	Investigation for Water Resources Projects – Use of Total Station & GPS (June 2006) Engineering Staff College of India, Hyderabad
2.	Dr.S.Suresh	Soft Computing Techniques for Engineering Application (July 2006) Alagappa Chettiar College of Engineering and Technology, Karaikudi
3.	Ms.K.Vidhya	Steel Concrete Composite Structures (Sep 2006) Kumaraguru College of Technology, Coimbatore



<b>S No</b>	<b>Name of the Faculty</b>	<b>Programme Attended</b>
4.	Prof.A.Murugesan	Earthquake Resistance Design of Concrete Structures (Oct 2006) Indian Institute of Science, Bangalore
5.	Ms.I.Vidhyavathi	Software Applications in Civil Engineering (Nov 2006) Government College of Technology, Coimbatore
6.	Ms.K.Vidhya	Special Concretes (Dec 2006) Indian Institute of Technology Madras, Chennai
7.	Ms.K.Vidhya	Special Concretes (Dec 2006) Indian Institute of Technology Madras, Chennai
8.	Ms.S.P.Shanmuga Priya	Municipal Solid Waste Management (Dec 2006) College of Engineering, Anna University, Chennai
<b>Year 2005-2006</b>		
1.	Prof. A. Murugesan	Emerging Potential of Steel Composites as Powerful Alternative in Construction Industry (Feb 2005) SRM Institute of Science and Technology, Chennai
2.	Prof. A. Murugesan	Astronomy (Related to Surveying – II & Survey Camp) (Nov 2005) Bannari Amman Institute of Technology, Sathyamangalam

## FASHION TECHNOLOGY

<b>Year 2009-2010</b>		
<b>S. No</b>	<b>Name of the Faculty</b>	<b>Programme Attended</b>
1.	Dr. C. V. Koushik	3rd ITEC International Textile education Conference, SSM College International Conference “ATNT ” BIT
2.	S. Anita	International Conference “ATNT ” BIT
3.	C.Prakash	3rd ITEC International Textile Education Conference, SSM College
4.	D. Raja	3rd ITEC International Textile Education Conference, SSM College
5.	S. Chinnadurai	Pedagogy, Sona College of Technology, Salem
<b>Year 2008-2009</b>		
1.	D. Raja	Pedagogy, Sona College of Technology, Salem International Conference “ATNT , Avinashilingam Deemed University
2.	C.Prakash	International Conference “ATNT , Avinashilingam Deemed University

<b>S.No</b>	<b>Name of the Faculty</b>	<b>Programme Attended</b>
3.	M. Yuvarani	Pedagogy, Sona College of Technology, Salem
4.	M. Sri Vidhya	Structural Properties of Textile fibers (SDP) (AICTE Sponsored), <b>Bannari Amman Institute of Technolgy, Sathyamangalam</b>
<b>Year 2007-2008</b>		
1.	Dr. C. V. Koushik	International Conference ATNT- KCT
2.	G.Guneseakaran	International Conference ATNT- KCT
3.	V.Ramesh babu	International Conference ATNT- KCT
4.	C. Prakash	National Conference Functional Textiles and Apparels – SSM college
5.	D. Tamilalagan	Pedagogy, Sona college of Technology Salem. IPR Awareness Programme, Sona college of Technology, Salem
6.	M. Sri Vidhya	Pedagogy, Sona college of Technology, Salem. IPR Awareness Programme, Sona college of Technology, Salem

SNo	Name of the Faculty	Programme Attended
<b>Year 2006-2007</b>		
1.	C.V.Koushik	International Conference“Advances In Fibrous Materials, Non Woven and Technical Textiles” SSM College of Engineering, India and Texas Tech University, USA at Coimbatore First International Textile Educational Conference, SSM College
2.	G. Gunesekaran	National-Level Conference (NFTA ‘06) PSG College of Technology International Conference “Advances In Fibrous Materials, Non Woven and Technical Textiles” SSM College of Engineering, India and Texas Tech University, USA at Coimbatore

S.No	Name of the Faculty	Programme Attended
3.	V. Ramesh Babu	<p>Pedagogy Training, Sona College of Technology, Salem National-Level Conference (NFTA '06) on Functional Textile and Apparel, PSG College of Technology National-Level Conference on Emerging Trends in, Fabrics, Fashion and Finishes Kongu Arts and Science College National-Level Conference (NSFC'06)</p> <p>Speciality Finishes on Garments KSR College of Technology</p> <p>International Conference Textiles and Clothing, Sardar Vallabhai Institute of Textile Management</p> <p>International Conference "Advances In Fibrous Materials, Non Woven and Technical Textiles" SSM College of Engineering, India and Texas Tech University, USA at Coimbatore</p>

<b>S.No</b>	<b>Name of the Faculty</b>	<b>Programme Attended</b>
4.	M. Senthilkumar	International Conference “Advances In Fibrous Materials, Non Woven and Technical Textiles” SSM College of Engineering, India and Texas Tech University, USA at Coimbatore National-Level Conference, BIT
5.	P.Dhanapal	International Conference “Advances In Fibrous Materials, Non Woven and Technical Textiles” SSM College of Engineering, India and Texas Tech
6.	K.Saravanan	First International Textile Educational Conference, SSM College

### **ELECTRICAL and COMMUNICATION ENGINEERING (PG)**

<b>Year 2009-2010</b>		
<b>S.No.</b>	<b>Name of the Faculty</b>	<b>Programme Attended</b>
1.	Mr.A.Radhakrishnan	Pedagogy training Programme
2.	Mrs. V. Meenakshi	Pedagogy training Programme
<b>Year 2008-2009</b>		
1.	Mr. C. Arunkumar	Pedagogy training Programme

<b>S.No</b>	<b>Name of the Faculty</b>	<b>Programme Attended</b>
2.	Mrs. N. Sasirekha	Pedagogy training Programme
3.	Mr. G. Ravi	Pedagogy training Programme
<b>Year 2007-2008</b>		
1.	Dr. K. R. Kashwan	Staff Development Programme
<b>Year 2006-2007</b>		
1.	Mr. J. Harirajkumar	Pedagogy training Programme Faculty Development Programme
2.	Mrs. T. Loganayagi	Pedagogy training Programme
3.	Mr. S. Dhanasekar	Pedagogy training Programme

## MASTER OF BUSINESS ADMINISTRATION

Year 2009-2010		
S.No.	Name of the Faculty	Programme Attended
1.	Dr. M. Selvaraj	FDP on Disaster Management
2.	-do-	Four day programme in Leadership Development
3.	-do-	FDP on Bloom's Taxonomy
4.	-do-	Programme on Structural Equation Modelling
5.	Dr. A. Rajagopal	AICTE sponsored SDP on Wireless and Mobile Networks
6.	-do-	FDP on Bloom's Taxonomy
7.	-do-	Programme on Neuro Linguistic Programming
8.	-do-	Programme on Structural Equation Modelling
9.	Dr. Syed Ibrahim	FDP on Bloom's Taxonomy
10.	-do-	FDP on Bloom's Taxonomy
11.	Mr.Vijaykumar. N. Patel	Orientation programme on Industrial Expectations



<b>S.No</b>	<b>Name of the Faculty</b>	<b>Programme Attended</b>
12.	-do-	AIMA's 26 <sup>th</sup> National Management convention "Creating Lasting Value"
13.	-do-	HR Conclave 2009 – The changing Face of HR
14.	-do-	Programme on Neuro Linguistic Programming
15.	Ms. S. P. Thenmozhi	FDP on Art of writing Research Articles
16.	-do-	FDP on Bloom's Taxonomy
17.	-do-	FDP on Bloom's Taxonomy
18.	-do-	Programme on Neuro Linguistic Programming
19.	-do-	Programme on Structural Equation Modelling
20.	Ms. P.K. Anjani	FDP on Bloom's Taxonomy
21.	-do-	FDP on Bloom's Taxonomy
22.	-do-	Programme on Neuro Linguistic Programming
23.	-do-	Programme on Structural Equation Modelling

<b>S.No</b>	<b>Name of the Faculty</b>	<b>Programme Attended</b>
24.	Ms. S. Suja	FDP on Bloom's Taxonomy
25.	-do-	FDP on Bloom's Taxonomy
26.	-do-	Programme on Neuro Linguistic Programming
27.	-do-	Programme on Structural Equation Modelling
28.	Ms. L. Shankari	FDP on Bloom's Taxonomy
29.	-do-	FDP on Bloom's Taxonomy
30.	-do-	National Workshop on Application of Advanced research techniques
31.	-do-	Programme on Structural Equation Modelling
32.	-do-	Programme on Neuro Linguistic Programming
33.	Mr. D. Immanuel	FDP on Bloom Taxonomy
34.	Ms. P. Praba Devi	Two day seminar on Bloom's Taxonomy
35.	-do-	Managerial Effectiveness in Global Context
36.	-do-	Two day seminar on Bloom's Taxonomy

<b>S.No</b>	<b>Name of the Faculty</b>	<b>Programme Attended</b>
37.	Ms. R. N. Padma	FDP on Bloom's Taxonomy
38.	-do-	FDP on Bloom Taxonomy
39.	Ms. A. Sasirekha	FDP on Bloom's Taxonomy
40.	Ms. Umaya Salma Shajahan	FDP on Bloom's Taxonomy
41.	-do-	FDP on Bloom Taxonomy
42.	-do-	Programme on Neuro Linguistic Programming
43.	-do-	Programme on Structural Equation Modelling
44.	Ms. N. Nithya	AICTE Sponsored one week workshop on Case Teaching and Case Writing
45.	-do-	National Level Workshop - FDP on Application of Advanced Research Technique
46.	-do-	One day programme on Building Competitiveness in Higher Education: The TQM way
47.	-do-	FDP on Neuro Linguistic Programme(NLP) for Management Teachers

<b>S.No</b>	<b>Name of the Faculty</b>	<b>Programme Attended</b>
48.	-do-	FDP on Bloom Taxonomy
49.	-do-	Workshop on Creativity and Innovation
50.	-do-	Programme on Structural Equation Modelling
51.	Mr.Subramanian Venkataraman	FDP on Bloom Taxonomy
52.	Mr. K.P. Naachimuthu	FDP on Bloom Taxonomy
53.	Ms. C.V. Sujaritha	National Level Workshop - FDP on Application of Advanced Research Technique
54.	-do-	FDP on Bloom Taxonomy
55.	-do-	FDP on Bloom's Taxonomy
56.	-do-	Programme on Neuro Linguistic Programming
57.	-do-	Programme on Structural Equation Modelling
58.	Mr. A. S.Satish Kumar	FDP - AICTE Sponsored one week workshop on Case Teaching and Case Writing
59.	-do-	FDP on Bloom Taxonomy
60.	Mr. V. Padmanand	FDP on Bloom Taxonomy

S.No	Name of the Faculty	Programme Attended
61.	Mr. G. Padmanaban	Orientation program on Industrial Expectations
<b>Year 2008-2009</b>		
1.	Dr. Syed Ibrahim	Research design and use of statistical tools in management research
2.	-do-	AICTE Sponsored one week FDP on Financial Derivatives -IIM Kozhikode
3.	-do-	FDP on Dynamics of Management Consultancy
4.	Ms. S. P. Thenmozhi	FDP on Dynamics of Management Consultancy
5.	Ms. P. K. Anjani	Research design and use of statistical tools in management research
6.	-do-	Two day seminar on Managing HR during the Recent Downturn – Experiences of some of the Best Indian companies
7.	Ms. S. Suja	Research design and use of statistical tools in management research
8.	Mr. A. Stephen	FDP on Dynamics of Management Consultancy

<b>S.No</b>	<b>Name of the Faculty</b>	<b>Programme Attended</b>
9.	Ms. L. Shankari	Research design and use of statistical tools in management research
10.	-do-	AICTE Sponsored one week FDP on Financial Derivatives- IIM Kozhikode
11.	-do-	Research in Finance
12.	-do-	Empirical study on bank customer personality and customer attitude towards service quality – an innovative perspective - Innovative practices in management (IPM – 2009)
13.	Mr. D. Immanuel	Research design and use of statistical tools in management research
14.	-do-	AICTE Sponsored one week FDP on Research Methods in Management
15.	MS. P. Praba Devi	Second World Conference on Siddha Philosophy, Chennai
16.	Ms. Umayal Salma Shajahan	Research design and use of statistical tools in management research
17.	-do-	Workshop on Case Method of Teaching
18.	-do-	AICTE Sponsored one week FDP on Financial Derivatives - IIM Kozhikode

<b>S.No</b>	<b>Name of the Faculty</b>	<b>Programme Attended</b>
19.	-do-	FDP on SAP Business One
20.	Ms. N. Nithya	Research design and use of statistical tools in management research
21.	-do-	Workshop on Case Methods of Teaching
22.	-do-	FDP on SAP Business One
23.	-do-	FDP on Dynamics of Management Consultancy
24.	-do-	AICTE Sponsored one week FDP on Research Methods in Management
25.	-do-	Three days FDP on Basic Research methods and Applications of SPSS
26.	Ms. C.V. Sujaritha	Research design and use of statistical tools in management research
27.	-do-	Workshop on Case Method of Teaching
28.	Mr.K. P. Naachimuthu	Research design and use of statistical tools in management research
29.	-do-	One day workshop on “Publishing in International Journals”

<b>S.No.</b>	<b>Name of the Faculty</b>	<b>Programme Attended</b>
30.	Ms. A. Sasirekha	Research design and use of statistical tools in management research
31.	Ms. R. Archana	Research design and use of statistical tools in management research
32.	Ms. S. Saraswathi	Research design and use of statistical tools in management research
33.	Mr.A.S.Satish Kumar	FDP on Teaching Pedagogy
<b>Year 2007-2008</b>		
1.	Dr. D. Dhanapal	Participated in the “Regional Summit on Quality in Education”
2.	Dr. M. Selvaraj	Six sigma green belt certification
3.	-do-	National Seminar on National Knowledge Commission’s Recommendations on Higher Education
4.	-do-	Short term program on Intellectual property rights and patent system in India
5.	-do-	A study of employees engagement and retention strategies in textile mills with reference to women apprentices
6.	Prof. R. David Rajesh	Infosys Campus Connect Soft Skills Training Workshop



<b>S. No.</b>	<b>Name of the Faculty</b>	<b>Programme Attended</b>
7.	Dr. Syed Ibrahim	Two day FDP on Enhancement and value addition in management education: Case
8.	Prof. Vijaykumar.N. Patel	Two day programme on Psychometircs and Competency Mapping
9.	Ms. S. P.Thenmozhi	Bridge Course in Retail Management
10.	-do-	Six sigma green belt certification
11.	-do-	Infosys Campus Connect Soft Skills
12.	Ms. S. P.Thenmozhi	Short term program on Intellectual property rights and patent system in India
13.	Ms. P. K. Anjani	Bridge Course in Retail Management
14.	-do-	Six sigma green belt certification
15.	-do-	Executive Education Programme on Strategic Management for Teachers: Foundation Course
16.	-do-	Infosys Campus Connect Soft Skills Training Workshop
17.	-do-	AICTE Sponsored Quality Improvement Programme on Current Trends in
18.	Ms. S. Suja	Infosys Campus Connect Soft Skills Training Workshop
19.	Mr. A. Stephen	Two day programme on Psychometircs and Competency Mapping
20.	Ms. L. Shankari	Six sigma green belt certification

<b>S. No</b>	<b>Name of the Faculty</b>	<b>Programme Attended</b>
21.	-do-	Executive Education Programme on Strategic Management for Teachers: Foundation Course
22.	-do-	Infosys Campus Connect Soft Skills Training Workshop
23.	-do-	Two day FDP on Enhancement and value addition in management education: Case method of teaching and case writing
24.	Mr. D. Immanuel	Bridge Course in Retail Management
25.	-do-	Six sigma green belt certification
26.	-do-	UGC sponsored National Seminar on Consumer Behaviour: Current Trends and
27.	Ms. P. Praba Devi	Bridge Course in Retail Management
28.	-do-	One day workshop for Ph.D Scholars – Research Orientation. Public Review workshop
29.	-do-	One day workshop for Ph.D Scholars – Research Orientation. Public Review workshop
30.	Ms. Umayya Salma Shajahan	Six sigma green belt certification
31.	-do-	Executive Education Programme on Strategic Management for Teachers: Foundation Course

<b>S. No</b>	<b>Name of the Faculty</b>	<b>Programme Attended</b>
32.	-do-	Two day FDP on Business Application Software
33.	-do-	AICTE Sponsored Three weeks Induction Training Programme in Management for Young Teachers
34.	Ms. N. Nithya	Pedagogy Training Programme
35.	-do-	Six sigma green belt certification
36.	-do-	Executive Education Programme on Strategic Management for Teachers: Foundation Course
37.	-do-	Two day FDP on Business Application Software
38.	Mr.K.P. Naachimuthu	Two days programme on Managerial Effectiveness competencies
39.	-do-	Bridge Course in Retail Management
40.	-do-	Three weeks induction training programme on Management for young teachers
41.	-do-	MHRD / AICTE sponsored Summer School on Recent Development in Human Resource Management and Development

<b>S. No</b>	<b>Name of the Faculty</b>	<b>Programme Attended</b>
42.	Ms. R. Archana	Bridge Course in Retail Management
43.	-do-	Two days programme on Managerial Effectiveness competencies
44.	-do-	Three weeks induction training programme on Management for young teachers
45.	-do-	Management teachers' programme on Strategic Management
46.	Ms. S. Sarawathi	Infosys Campus Connect Soft Skills Training Workshop
47.	-do-	Two day FDP on Enhancement & Value addition in Management Education: Case Method of teaching and case writing
<b>Year 2006-2007</b>		
1.	Dr. D. Dhanapal	Participated in the "Regional Summit on Quality in Education"
2.	Dr. M. Selvaraj	MDP on Manufacturing Excellence. Best Practices of World Class Manufacturing
3.	-do-	AICTE Sponsored one week International workshop on Case Teaching and Case Writing
4.	Prof. R. David Rajesh	Three days workshop on Training the Trainers
5.	-do-	Management teachers' programme on Strategic Management
6.	-do-	FDP On Nuances of Strategy Implementation
7.	Dr. J. Ashok	Management teachers' programme on Strategic Management

<b>S.No</b>	<b>Name of the Faculty</b>	<b>Programme Attended</b>
8.	Prof. Vijaykumar. N.	Regional Summit on Quality in Education
9.	Ms. S. P.Thenmozhi	Two day programme on Lean
10.	Ms. S. Suja	Six sigma green belt certification
11.	Mr. A. Stephen	Participated in the “Regional Summit on Quality in Education”
12.	-do-	AICTE Sponsored one week International workshop on Case Teaching and Case Writing
13.	Ms. L. Shankari	Harmony in Diversity - Emerging competitiveness Paradigms
14.	Mr. D. Immanuel	Executive Education Programme on Strategic Management for Teachers: Foundation Course
15.	Ms. Umaya Salma Shajahan	Two day residential programme on Mentoring and Training methods
16.	-do-	AICTE Sponsored one week International workshop on Case Teaching and Case Writing
17.	-do-	Two day programme on Team Building and Leadership
18.	Ms. A. Sasirekha	AICTE Sponsored one week International workshop on Case Teaching and Case Writing

<b>S.No</b>	<b>Name of the Faculty</b>	<b>Programme Attended</b>
19.	-do-	Two day programme on Team building & Leadership
20.	-do-	Two days programme on Mentoring and Training methods
21.	-do-	MDP on Manufacturing Excellence. Best Practices of World Class Manufacturing
22.	Mr. K. P. Naachimuthu	Participated in the “Regional Summit on Quality in Education”
23.	-do-	International Conference, Convocation & Award presentation ceremony on “Sustainable Development through Holistic Education”
24.	-do-	Three days workshop on Training the Trainers
25.	-do-	Two days programme on Competitive Managerial Skills
26.	-do-	Two days programme on Goal Setting & Time Management
27.	-do-	Two day programme on Effective Presentation Skills
28.	Ms. R. Archana	Two days programme on Goal Setting & Time Management

## MASTER OF COMPUTER APPLICATIONS

<b>Year 2009-2010</b>		
<b>S.No</b>	<b>Name of the Faculty</b>	<b>Programme Attended</b>
1.	Mrs.T.Lalitha	Wireless and Mobile Networks
2.	Mrs.R.Sivakami	DB2 Fundamentals
3.	Mrs.R.Sivakami	Enterprise Resource Planning
4.	Mrs.S.Aruna	Oracle
6.	Mrs.S.Lakshmi	DB2 Fundamentals
7.	Mrs.T.Lalitha	DB2 Fundamentals
8.	Mrs.M.Geetha	Enterprise Resource Planning
9.	Mrs.M.Geetha	DB2 Fundamentals
10.	Mrs.A.Vanitha	DB2 Fundamentals
11.	Mrs.R.Shanthy	DB2 Fundamentals
12.	Mrs.J.Sujipriya	Enterprise Resource Planning
13.	Mrs.P.Arun Kumar	Enterprise Resource Planning
14.	Mrs P.Arun Kumar	DB2 Fundamentals
<b>Year 2008-2009</b>		
1.	Ms.N.Jayasudha	French Language Level 1

<b>S.No.</b>	<b>Name of the Faculty</b>	<b>Programme Attended</b>
2.	Dr.G.M.Kadhar Nawaz	IUCEE- Effective Teaching: Cooperative Learning: Effective Faculty Development, Outcomes Based Education: Quality and Accreditations
3.	Dr.S.P.Shantharajah	IUCEE- Effective Teaching: Cooperative Learning: Effective Faculty Development, Outcomes Based Education: Quality and Accreditations
4.	Ms.N.Jayasudha	IBM Community Edition Software
6.	Mrs.S.Lakshmi	Trends in Computing
7.	Mrs.S.Lakshmi	Introduction to SPSS 17.0
8.	Mr.P.Arun Kumar	Pedagogy Training Programme
9.	Mrs.R.Sivakami	Web Services Architectures and Applications
<b>Year 2007-2008</b>		
1.	Dr.T.Padma	Secured Computing
2.	Mr.N.Balakrishnan	Research & Administration Methodology
3.	Mrs.S.Aruna	Pedagogy Training Programme
4.	Mrs.S.Aruna	Data Mining



<b>S.No.</b>	<b>Name of the Faculty</b>	<b>Programme Attended</b>
5	Ms.N.Jayasudha	Teaching , Learning Process
6	Mrs. S.Lakshmi	Pedagogy Training Programme
7	MrsT.Lalitha	ERP-ABAP
8	Mrs.M.Geetha	Pedagogy Training Programme
9	Mrs.M.Geetha	Data Mining
10	Mrs.A.Vanitha	Open Source & IBM Comm Edition Workshop
11	Mrs.R.Shanthy	Managing People
12	Mrs.J.Sujipriya	Pedagogy Training Programme
13	Dr.G.M.Kadhar Nawaz	Conference on Autonomous Technical Institutions (RCATI)
<b>Year 2006-2007</b>		
1.	Dr.T.Padma	Computer Network Routing and Communication Systems
<b>Year 2005-2006</b>		
1.	Dr.G.M.Kadhar Nawaz	Placement and Training cell- Leadership that Gers Results
2.	Dr.S.P.Shantharajah	Placement and Training cell- Leadership that Gers Results

**2.4.11 What percentages of the faculty have served as resource persons in Workshops / Seminars / Conferences during the last five years?**

Department	Percentage of faculty served as resource persons				
	2005 - 2006	2006- 2007	2007 - 2008	2008 - 2009	2009- 2010
MECHANICAL	72	81	-	82	82
EEE	70	56	37	61	49
ECE	10	7	6	7	10
CSE	21	31	35	27	57
IT	-	14	7	13	17
CIVIL	-	13	40	-	28
ECE (PG)	11	14	14	11	14
FT	-	63	40	15	31
MBA	-	33	11	17	6
MCA	17	17	17	13	15
<b>Average annual percentage at college level</b>	<b>34</b>	<b>33</b>	<b>23</b>	<b>27</b>	<b>31</b>

**2.4.12 What percentage of teaching staff have participated in workshops/Seminars/ Conferences and presented papers during the last five years?**

<b>Department</b>	<b>Percentage of faculty participated and presented</b>				
	<b>2005 2006</b>	<b>2006- 2007</b>	<b>2007 - 2008</b>	<b>2008 - 2009</b>	<b>2009- 2010</b>
MECHANICAL	92	89	90	90	94
EEE	83	79	55	79	67
ECE	62	50	42	45	50
CSE	93	77	83	63	71
IT	-	64	78	67	60
CIVIL	21	56	80	60	50
ECE (PG)	100	100	100	100	100
FT	-	88	40	77	39
MBA	-	78	89	100	100
MCA	75	25	17	44	65
<b>Average annual percentage at college level</b>	<b>75</b>	<b>71</b>	<b>67</b>	<b>73</b>	<b>70</b>

#### **2.4.13 Has the faculty been introduced and trained in the use of**

a) **Computers** : Yes

b) **Internet** : Yes

- Formal training in the regular use of computers or the Internet has not been found necessary as all the faculty are already conversant with them even at the time of joining the college as teachers.
- However, when new software is installed for routine use by faculty, e.g. that related to the college's MIS, internal marks, etc, the course faculty are trained to use them.

c) **Audio-visual Aids:**

Yes; the faculty are given a demo on the use of these aids as soon as they are supplied to individual departments.

d) **Computer-aided-teaching packages:**

As explained in Sections 2.3.4 (b) and 2.4.7 (a) above, the Computer Based Teaching/ Training (CBT) packages in use at the college are mostly those developed at the college itself, through its Learning Resources Development Centre, called "Sonaversity". These CBTs are designed to be user-friendly and require little formal training.

## **2.5 Evaluation Process and Reforms**

### **2.5.1 Does the college evaluate teachers on teaching and research performance? How does the evaluation help in the improvement of Teaching and Research?**

Teaching performance of the faculty is evaluated mainly by the overall class pass percentage in the course/s taught by the faculty. Faculty showing above 90% and 100% pass results are given motivating cash awards every year on Teachers Day. Faculty therefore work sincerely to continuously enhance their performance. The result is a vast improvement in the teaching-learning process. Teaching performance is also evaluated by analysis of student feedback on faculty teaching, as explained in Section 2.5.2.

Research performance of faculty is gauged by the number of quality publications in refereed or high impact factor journals, quantum of research grants obtained, patents applied for or granted, etc. It is recognised by attractive cash awards to the achieving faculty on Teacher Awards Day. This motivation encourages faculty to pursue research work. The special increments provided to faculty who successfully complete their PhD degrees are another way of improving research.

**2.5.2 Has the institution introduced evaluation of teachers by the students?  
How is the feedback analysed and implemented for the improvement  
of Teaching and Learning?**

Faculty teaching performance is graded as A<sup>+</sup> (the best), A, B, C and D (the worst) on the basis of written feedback on individual faculty performance obtained from students for all theory courses.

Faculty getting a D-Grade are replaced by faculty with a good record of teaching; those having a C-Grade are either deputed for pedagogical training or are involved in team teaching with a senior teacher. Faculty getting a C-Grade are to show improved results in a subsequent feedback taken from students two weeks later. The grades obtained by faculty are taken into consideration during the annual performance review for salary revision. In view of the grading system for the teaching efficiency of faculty and its impact on performance and salary review, faculty are normally committed to enhance their teaching performance and thereby to improve the teaching-learning process.

**2.5.3 Does the institution promote self-appraisal of teachers? If yes, how often?**

The HODs of individual departments are encouraged to promote self-appraisal of their faculty, at least once a year. This is predominantly to instil in faculty the habit of evaluating their own performances across the entire spectrum of teacher skills expected of an engineering college or business school teacher. Some departments practise this technique of faculty development.

**2.5.4 Is the appraisal by the teachers reviewed by the head of the institution and used to improve the quality of teaching?**

The head of institution monitors the quality of teaching periodically, but indirectly, by reviewing the Faculty Record Books (FRB) of all faculty. The FRBs include the extent of syllabus covered by the faculty, the tests organised, the marks obtained by students in weekly tests, the corrective action taken by the faculty for below-par performers, the seminars conducted, the list of students counselled, etc.

The quality of teaching is reviewed by the HODs of the various departments and any action taken by them to improve the quality is communicated to the head of institution.

The head of institution also personally reviews the overall performance of individual faculty in concurrence with the respective HODs during the annual faculty performance review for salary revision.

**2.5.5 Does the institution have an academic audit of departments? Illustrate.**

The institution is an “ISO-Certified Institution” and has a ‘Quality Management System’ (Sona-QMS) being implemented. As part of the requirement of the QMS, ‘Internal Quality Audits’ (IQA) are conducted at the end of every semester, in which all departments and teaching faculty are audited for academic performance. The auditors perform the audit with the help of a ‘check-list’ that covers all the academic activities required to be performed by the department and teaching faculty. The academic audit also covers a scrutiny of the status of achievement of the “Quality Objectives” set by the management.

**2.5.6 Based on the recommendations of the academic audit what specific measures have been taken by the institution to improve the teaching, learning and evaluation?**

To improve the teaching, learning and evaluation process, the HODs are expected to take corrective action on any 'non-conformities' pointed out by the auditors on the basis of their findings from the academic quality audit.

A few of the specific measures taken by the institution to improve the teaching, learning, and evaluation process are detailed below:

- a) Teaching faculty who have been rated 'below-par' in the student feedback are either counselled by the HODs concerned or advised to attend training programmes in pedagogy organised by the HR Department or be involved in team teaching.
- b) Students whose academic performance is below average are identified and given special guidance and counselling by the faculty concerned.
- c) The challenging courses in a semester are identified at Class Committee Meetings', and special coaching is organised for the students in these courses.
- d) Weekly tests are conducted on Monday and Wednesday every week, and the evaluated papers are issued by the Thursday of the same week. Students failing the tests are to write retests on Saturday, same week.
- e) It is also ensured that there is 'Continual Improvement' in the academic results.



**2.5.7 How does the institution monitor the performance of the students?  
(Annual/ Semester exam, Trimester Exam, Midterm Exam,  
Continuous assessment, Final exam, etc.)**

Student performance is monitored by means of a continuous assessment process in practice for over a decade at the college and consisting of three weekly tests per theory course and a model examination on the lines of the university examinations. Retests are also organised for weekly tests every Saturday to help below-par students enhance performance. The course faculty counsel below-par students and urge them to do well in future tests. Academic counselling of students is also a part of this system and this is achieved on a fortnightly basis by designated faculty, acting as Faculty Advisors, as stated in Section 2.2.7.

For lab courses, student performance is monitored continuously at the regular lab classes; a model exam is conducted at the completion of all the lab experiments. Thereafter, for both the theory and lab courses, the final (university) exams are organised.

**2.5.8 How are the evaluation methods communicated to students at the beginning of the year?**

When all of the admissions are over for an academic year, a formal Fresher's Day meeting is organised for the incoming students and their parents. At this meeting, a clear overview of the college's facilities and the continuous evaluation system is presented to all the students.

**2.5.9 What is the method of evaluation followed? (Central, Door, Double evaluation, etc.,)**

Anna University of Technology, to which the institution is affiliated, follows Central Valuation method of evaluation. For the Autonomous 2010 curricula also, the institution proposes to follow the Central Valuation method of evaluation.

**2.5.10 What is the mechanism for Redressal of grievances regarding evaluation?**

The university has established a system for redress of student grievances in evaluation, whereby they are given an opportunity to apply for revaluation within a week of the announcement of the normal exam results. The results of such revaluation are announced about a month of the applications.

A similar system if addressing student grievances in evaluation is also proposed for the Autonomous (2010) Regulations of the college

**2.5.11 When are the examination results declared? Give the time frame?**

The university examination results are usually declared about two months after the completion of the examinations. If the final examinations are over say by November end, the results will be declared by the end of the following January.

**2.5.12 Does the institution communicate to the parents regarding the evaluation outcome? Describe the relative weighting given to assignments/seminars/ dissertation/field work and written exams?**

The institution communicates with the parents of students on a regular basis. The marks list of individual students for the three cycles of weekly tests are sent by individual departments to the parents, with a request in some cases of below-par student performance to meet with the Class Counsellor/ HOD concerned. Low levels of student attendance are also communicated via SMSs to the parents concerned.

The relative weighting of the components of evaluation is as follows:

**a) Continuous Internal Assessment:**

Theory courses: Weekly tests 30%; Curricular Assignments 20%;  
Total – 50%

Lab courses: Regular lab class performance + model exams = 50%

**b) Final Examination: 50%**

**2.5.13 Explain the functioning of the office of the controller of examinations.**

The institution has a curriculum prescribed by Anna University of Technology, Coimbatore. The examination system, namely, organising the final semester-end examinations, evaluation of answer scripts and announcement of results, etc is therefore run by a Controller of Examinations (COE) appointed at the university level.

For the institution's autonomous curriculum which takes effect from 2010, it is proposed to have a COE operating from an exclusive examination cell. The COE will arrange for the question papers with the help of external question paper setters. There will be a Central Valuation immediately after the exams predominantly with external faculty. The results will be declared within about a week of the last day of examinations.

**2.5.14 How long has the current system of evaluation been in practice?**

It has been in practice ever since the institution has been an affiliated college.

**2.5.15 Has the institution carried out any evaluation reforms? If yes, what are the reforms made with reference to evaluation? (Peer evaluation, Double evaluation, Open book examination, Question Bank, Moderation, Internal assessment etc.)**

As an affiliated institution, under the erstwhile Anna University, Chennai up to 2006, the relative weighting of the components of evaluation was 20% for the internal assessment and 80% for the final examination.

As of 2007, when Anna University was regionalised and the institution consequently came under the Coimbatore constituent of the university, an evaluation reform changed the weighting for the internal assessment to 50% and that of the final examination 50%.

Additionally, for the internal assessment, modified components were prescribed as explained in Section 2.5.12 above.

Evaluation reforms are being introduced in the Autonomous curriculum of the institution from the academic year 2010-2011 onwards.

**2.5.16 How is the evaluation process made transparent? Illustrate the different stages of evaluation till the declaration of results?**

The institution follows the evaluation process prescribed by the university. An online examination system has recently been introduced and the institution has an exclusive room for confidential online exchanges with Anna University of Technology COE's Office. Question papers are transmitted online to the college on the day of the concerned examinations and the desired numbers of copies are printed in this room for distribution to the various exam halls across the college. A university representative is appointed for overseeing these operations to ensure security and confidentiality in the proceedings.

With regard to the internal assessment, the process is transparent in that the components of internal assessment, namely periodic tests and assignments, are evaluated by the concerned faculty and the marks are entered in the students' notebooks assigned specifically for the components. The students are thus aware of their internal marks. When the final internal assessment marks of the students are sent to the university, they are uploaded onto the university website for free access by any student.

At the end of the examinations, the answer papers are sent back to the university via the university zonal office for onward transmission to the central valuation site decided by the university. The central valuation is organised on dates scheduled by the university and the evaluated answer scripts and the filled-in OMR mark sheets are despatched to the university by the concerned university representatives. The marks are computerised

at the university and synthesised with the internal assessment marks. The final results are uploaded onto the university's website for all to see.

**2.5.17 Mention the number of malpractice cases reported and how they are dealt with (average per year)**

There has been no case of malpractice in the university examinations at this college. However, in the event of malpractice, the university has prescribed stringent deterrents like cancellation of all the papers, cancellation of the paper in question, fines, etc, depending upon the gravity of the offence.

**2.5.18 Does the college provide the photocopy of answer scripts to students? Give details of the practice.**

Under the university examination evaluation system, students who believe they deserve more marks than they have actually obtained in any of the courses of an examination are allowed to apply for a straight revaluation of their answer scripts.

The rule also permits interested students to first request for a Xerox copy of their answer script and after a review of the valuation, to decide whether to apply for revaluation or not.

**2.5.19 Give details regarding the computerisation of the examination system?**

The Anna University of Technology (CBE) examination system is well and truly computerized, with each affiliated college having a mandatory computer enclosure for secure and confidential online transactions with the

COE of the university, for conduct of all semester and trimester examinations.

Question papers for all courses are received online on the day the concerned examinations are scheduled. For the practical examinations, the student attendance and marks particulars are uploaded online and transmitted to the COE on the same day. For the theory courses, the OMR sheets received by the COE from the valuation centres are computerised at the university itself.

**2.5.20 What are the measures taken by the institution to ensure security and confidentiality of the evaluation system?**

The evaluation system is organised entirely by the university to ensure total security and confidentiality at all stages of the system, as explained above in Section 2.5.16.

**2.6 Best Practices in Teaching, Learning and Evaluation**

**2.6.1 What innovations / best practices are followed by the college with regard to teaching, learning and evaluation, with reference to admission process, student profile / catering to diverse needs / teaching-learning process / teacher quality / evaluation process and reforms or any other quality initiatives?**

- a) Admission Process / Student Profile / Catering to Diverse Needs
- Bridge course for below-par students admitted to the college

- Management scholarships awarded to deserving categories of students, especially the economically-disadvantaged, the physically-challenged and women

b) Teaching-Learning Process

- Active Learning Resources Development Centre for developing CBT packages in a variety of courses to aid teaching/learning
- Lively classroom management with lectures using AV aids; team teaching, technical quizzes, lab-class viva, group discussion, seminars, etc also used to enhance teacher- student interaction
- Special remedial classes for students facing learning challenges
- Regular practice of keeping parents informed of their wards' academic performance
- MIS with campus-wide access for updated student attendance and academic progress record and with information-forwarding facility to parents via SMS
- Guest lectures on curricular topics by industry experts

c) Teacher Quality

- Staff awards for performance excellence
- Motivation for faculty development
- Access to satellite lectures, A-VIEW, NPTEL resources to regularly update knowledge

d) Other Quality Initiatives

- Common Placement Centre for all departments, with Corporate Relations Manager for organising campus interviews and placement training



- Exclusive HR department, with HR Manager for staff recruitment and regular pedagogical training
- New advanced research centre with sophisticated labs and research staff
- Holistic student development: Full-fledged sports and games facilities, encouragement for student research, ample exposure to cultural activities, etc
- International linkages for advanced research and twinning Masters degree programme

### **Criterion III: Research, Consultancy and Extension**

#### **3.1 Promotion of Research**

##### **3.1.1 Describe various steps taken to encourage research by the faculty (by providing seed money, grants, other facilities)?**

The following are steps taken to encourage research:

Faculty doing research are provided with equipments and other facilities like software, books and journal subscriptions etc.

- (i) The management is liberal in providing Laboratory spaces and buildings fore carrying out research. This is self evident that recently a separate R&D Centre was inaugurated by former President of India, Dr. Abdul Kalam. All R&D centres have separate and independent laboratories.
- (ii) Good quantum of financial assistance is available for the presentation of papers and travel expenses.
- (iii) Many faculty have availed seed money for beginning of research activity.

##### **3.1.2 Is research a significant activity of the college? How does the institution promote faculty participation in research and recognize faculty for guiding research?**

The research at the college is significant based on the facts that

- (i) The revenues generated through external grants, research and consultancy is 199.53 Lakhs

- (ii) Some of our products developed are used in space science, satellite communications, undersea applications and measurement applications by ISRO and other Industries.
- (iii) Our research products and services are used in rural development purposes.
- (iv) There are 538 National Conference, 336 International Conference and 272 International and National Journal Publications to the credit of the college.
- (vi) All the departments are recognized by Anna University of Technology, Coimbatore, as research centres for registering Ph.D. scholars and carrying out Ph.D. research in collaboration with university.
- (vii) There are currently 25 University recognized research supervisors/guides for Ph.D. in various specializations in engineering, science, computer applications and management.
- (viii) There are 113 research scholars currently pursuing Ph. D. in the college.

University recognizes research guides based on laid down rules and policies framed by syndicate and director of research of University. Management also encourages the faculty to undertake research and development activities.

### **3.1.3 What provision is made in the budget for research and development?**

The budget has separate provisions for expenses for the R&D and expected revenues from the research activities.

The budget is distributed for departments and for equipments/software etc.

**3.1.4 Does the college promote participation of the students in research through the academic programme?**

Yes. There is a good contribution for the research from students. This is evident that students have published many papers in journal and conferences. They have also won many prizes at national and international level. There are 4 patents in the process on the parts of students.

**3.1.5 What are the major research facilities developed and made available on the campus?**

- (xiii) Language lab
- (xiv) High Voltage Test and Measuring Equipment
- (xv) Free Open Source Software facility
- (xvi) IBM Centre for Excellence
- (xvii) High Energy Ball Mill
- (xviii) Metallurgical Microscope with image processing
- (xix) Thermal Evaporation Vacuum Coating Unit
- (xx) Spin coater
- (xxi) Adobe Bundle, Oracle database, Visual Prolog, SPSS, Apple MAC
- (xxii) 5 Million Spartan FPGA Kits
- (xxiii) XILINX, MATLAB, MULTSIM
- (xxiv) Antennae Kit Set, Video Fiber Link, LabVIEW
- (xxv) Photonics

**3.1.6 Does the college subscribe to research journals for reference as per the departmental requirements?**

Yes. Each Department has certain number of research journal such as IEEE Transactions, IE(I) Journals, Computer Society Journals, Transactions of ASME etc. Recommendations of Head of the Department is taken every year for any new/additional journal subscription.

**3.1.7 What are the initiatives taken by the institution for collaboration with other research organizations and industry?**

- (i) So far a total of **39** Signed MOUs
- (ii) Faculty internship facility at industries
- (iii) Visits by Industries to the Institution
- (iv) Student visits to the industries
- (v) Joint product development
- (vi) Joint academic programmes with foreign Universities

**3.1.8 Is there a research committee to facilitate and monitor research? Give details.**

Yes. There is a research committee which steers the research and development activities and guides for research related matters including that of purchase of equipments, monitoring the projects etc.

## **3.2 Research and Publication Output**

### **3.2.1 Give details of the ongoing minor and major projects?**

The following are few of the major and minor projects ongoing in the college:

- i) Radio wave propagation under rain and water droplets interference.
- ii) Brushless DC Motor design and development for ISRO.
- iii) Under-water High-Speed Brushless DC Motor design and development for National Institute of Ocean Technology.
- iv) CT Caliber for measurement for Megawin Switchgear Pvt Ltd  
(Minor)
- v) High Voltage Leakage and Insulation characterization in presence of impurity deposits on wires. (Minor)
- vi) Nano Technology and nano-materials.
- vii) Photonics and Nano Technology for Transistors

### **3.2.2 Does the college have research funding from the Government, Industry, NGO or International agencies? Give details**

Yes. There are grants (to a tune of Rs 199.54 Lakhs) from various agencies including from government organizations such as:

- (i) AICTE
- (ii) DST
- (iii) ISRO

- (iv) CSIR
- (v) TNSCST
- (vi) CCSTDS
- (vii) IEEE
- (viii) AU of Technology, Coimbatore
- (ix) IGCAR, Klpakam

**3.2.3 Does the college have research students currently registered for M.Phil & Ph.D? Give details of number of M.Phils / Ph.Ds awarded during the last five years?**

Yes. There are students registered for PhD and MPhil in the College.

Ph D. Registered: 113

M.Phil: 10

**3.2.4 Does the college provide fellowship/scholarship to research scholars?**

Yes. College provides assistantship in the form of equipments and other facilities including computing and software requiremnts.

**3.2.5 Does the college have post-doctoral fellows currently working in the institution?**

YES

**3.2.6 Give highlights of the collaborative research conducted by the faculty**

The following are major collaborative research conducted in the college:

- i) Indian Space and Research Organization: Brushless DC (BLDC) Motor and Quadruplex BLDC Torque Motor, both of which are being used in the ISRO satellites.
- ii) National Institute of Ocean Technology: Under-water High-Speed BLDC Motor for use in submarines; the product has been a great success up to a water depth of over 5 km.
- iii) Megawin Switchgear Pvt Ltd: CT Caliber for measurement of low current.
- iv) The research collaborations are already on with University of Bologna, Italy and University of Nebraska, USA.
- v) R-and-D in collaboration with industry (Eldatex, Sona-Vana Textiles)
- vi) College-Sponsored R-and-D in the areas of fabric comfort, textile finishing, eco-friendly dye-house effluent treatment, garment engineering, etc

**3.2.7 What research awards and patents were received by the faculty during the last five years?**

- (i) 7 patents filed
- (ii) Career Award for Young Teachers from AICTE, New Delhi
- (iii) Paper Publication awards
- (iv) Best R&D Activities and Best R&D
- (v) Grant Receiving awards

**3.2.8 Are there Research papers published by the faculty in refereed journals periodically, by the faculty? If yes, specify.**

Yes. There are total 272 Journal papers published by our learned faculties in various refereed journals.



### **3.2.9 Give the list of publications by the facilities**

- a. Books : **18**
- b. Research papers : **Conferences: 974, Journal : 272**
- c. Abstracts -
- d. Proceedings -
- e. Theses: **Ph.D. – 12, ME: 252**
- f. Any other (specify)

### **3.2.10 Furnish details about citation index / impact factor of publication by the faculty?**

Average Impact factor is 0.8 currently.

## **3.3 Consultancy**

### **3.3.1 List the broad areas of consultancy services provided by the Institution during the last 5 years (Industries, Government, NGO / Community / Public)**

The following are some of the consultancies undertaken at college:

- (i) Testing and Calibration of Electronic Current Transformer for Megawin Switchgear Pvt. Ltd., Salem.
- (ii) Software development consultancy for IGCAR, Kalpakkam, TN and Cypress Semiconductor Technology, Bangalore.
- (iii) Modeling and detailed drawing of Sinter Plant Feed Drum for JSW Steel Ltd. Pottaneri and Megawin Switchgear Pvt. Ltd., Salem.
- (iv) Analysis of heat transfer and cylinder failure for Vee Technology Pvt. Ltd., Salem.

- (v) Management Consultancy for KMC Consutrucitons Ltd., Royal Government of Bhutan, Godrej Home Appliances Division and Prem Textiles International, Karur.
- (vi) Consultancy for effects on radio wave propagation during rain fall for C-DAC, Pune, Calcutta University, Calcutta, University of Science and Technology, Cochin, National Physical Research Laboratory, New Delhi, National Atmospheric Research Laboratory, ISRO and Nigerian Meteorological Agency, Nigeria.
- (vii) Development of HTPC Software for Dutch Company, Software development for workflow management for VEE Technologies, Salem, and Bus Reservation System for N. S. Motors Service, Salem.
- (viii) Consultancy on datawarehouse and MIS for M/S Mukesh Associates, Salem, Project Management System for VEE Technologies, Salem.
- (ix) Flight models of BLDC Motors for VSSC, Trivandrum and BLDC Motors for underwater applications for NIOT, Chennai. Hibrid Stepper Motors for ISAC, Bangalore.
- (x) Industrial training consultancy at the executive, supervisory and shop-floor levels (Sponsored by Salem Steel Plant, Tamilnadu Women Development Corporation, JSW, etc)
- (xi) Setting up a pattern-making and garment construction labs for an ITI at Mettur (Sponsored by JSW)

**3.3.2 Does the institution publish the expertise available for consultancy services?**

Yes. It is available on the web pages of College. A separate web link has been provided for R & D expertise and related activities.

### **3.3.3 Give details regarding the nature of consultancy services and revenue generated? What are the mutual benefits accrued due to consultancy?**

The consultancy services are available in all the leading fields of engineering and technology, industrial problems, management solutions and academic training and skill enhancements. The Sonaversity, a publication centre and a unit of Sona College undertakes content developments and publications apart from multimedia application services for various organizations including Government's organizations and Universities.

- A significant revenue of Rs 84.00 lakhs generated from testing of starch
- Sona Speed has generated Rs 40.00 lakhs
- Sona PERT Rs 40.00
- Centre for NANO Materials generated Rs 29.00 lakhs
- Sona Centre for VLSI and Embedded SoC (SONA CVES) has generated 23.30 Lakhs through various grants
- CAD/CAM generated Rs 7.00 lakhs

## **3.4 Extension Activities**

### **3.4.1 What outreach programmes are organized by the institution? How are they integrated with the academic curricula?**

It is designed for need based and industry specific to facilitate skill development by providing employment/self employment for the school dropouts, semi skilled women, under privileged women and socially

disadvantaged in the community. The following are the programmes offered by the institution through Centre for Social Responsibility Initiatives (Training and Development for Employable Skills) for the welfare of the under privileged and Rural community in collaboration with social welfare organizations

<b>S. No</b>	<b>Name of the programmes</b>	<b>Collaboration</b>	<b>Targeted population</b>	<b>No. of people benefited</b>
1.	Multi Skilled Garment Technician	Department of Corporate social Responsibility Salem Steel Plant, Steel Authority of India (SAIL),	Unemployed and dropout rural Women	320
2.	Multi Skilled Garment Technician	Tamil Nadu Corporation for Women, Project Implementation Unit, Salem	Unemployed & Dropout Rural Women	60
3.	Multi Skilled Multimedia packages	Tamil Nadu Corporation for Women, Project Implementation Unit, Salem	Unemployed & Dropout Rural Youth	60
4.	Multi Skilled Data Entry Operator	Tamil Nadu Corporation for Women, Project Implementation Unit, Salem	Unemployed & Dropout Rural Youth	60
5.	Entrepreneurship Development Programme	Tamil Nadu Corporation for Women, Project Implementation Unit, Salem	Budding Women Entrepreneur	90
6.	Multi Skilled Garment Technician	Vazhnthu Kattuvom Project, Project under World Bank, Govt. Of Tamil Nadu	Unemployed Rural youth from below poverty line	56

S. No	Name of the programmes	Collaboration	Targeted population	No. of people benefited
7.	Multi Skilled Construction Assistant (Assistant Mason)	Vazhnthu Kattuvom Project, Project under World Bank, Govt. Of Tamil Nadu,	Unemployed Rural youth from below poverty line	50
8.	Dress Designing & Garment Making	Self Supporting Programme	Unemployed Women	69
9.	Language Programme - English	Self Supporting Programme	Budding women Entrepreneurs	51
10.	Health & Beauty Care Management	Self Supporting Programme	Unemployed Women	116
11.	Yoga	Self Supporting Programme	Budding women Entrepreneurs	30
12.	Multi Skilled Multimedia packages	Tamil Nadu Slum Clearance Board, Govt. Of Tamil Nadu	Unemployed youth from Slum	20
13.	Dress Designing and Garment Making	Department of Differently abled welfare, Govt. of Tamil Nadu	Differently abled people	33
14.	Domestic House Keeping	Tamil Nadu Corporation for Women, Project Implementation Unit, Salem	Unemployed & Dropout Rural Women	30
15.	Dress Designing	National Bank for Agriculture and Rural Development (NABARD)	Unemployed & Dropout Rural Women	25
16.	Embroidery			25
17.	Block Printing			25

Presently, we have **applied for registration** to act as Vocational Training Provider under Skill Development Initiatives Scheme of Government of India to facilitate Skill Development programmes to support unemployed and underprivileged.

**Sectors:**

- **Construction**
- **Hospitality**
- **Security**
- **Retail**
- **Garment making**
- **Beauty Culture and Hair Dressing**

The skill development programmes are designed to provide technical knowledge and hands on training to the participants to develop technical and entrepreneurial skills to enable to get employment /self employment.

The curriculum which is designed by the faculty of the discipline concerned are taken from the regular curriculum and modified to suit to the industry requirement and more focus is given for hands-on training to prepare the participants to perform well in the industry.

**3.4.2 How does the college promote institution-neighborhood network in which students acquire service training, which contribute to sustained community development?**

Our institution has collaborated with other welfare departments and Corporates to promote institution neighborhood net work to support under-privileged. Centre for Social Responsibility Initiatives (Training and development of employable skills) of our institution is facilitating training programmes in collaboration with industries, welfare departments and financial institutions to support the under-privileged in the community for the sustainable development.

The following are the like-minded organizations in our network:

- Department of Corporate Social Responsibility, (SAIL) Steel Authority of India Ltd, Salem Steel Plant
- Tamil Nadu Corporation for Development of Women through Implementing Units, Govt. of Tamilnadu, Salem District
- Department of Social Welfare (through Vazhnthu Kaattuvom Project of World Bank sponsored programme), Govt. of TamilNadu, Salem District
- Tamil Nadu Slum Clearance Board, Project Implementing Unit, Govt. of Tamil Nadu, Salem Dist,
- National Bank for Agriculture and Rural Development (NABARD), Salem District
- Department of Corporate Social Responsibility, Jindal Steel Work (JSW) Steel Ltd, Pottaneri, Salem
- Department of Welfare of Differently abled, Govt. of Tamil Nadu, Salem Dist

In the above programme, our faculty members and students are involving themselves and share their expertise for the promotion of livelihood of the poor in the rural community.

**3.4.3 How does the institution promote the participation of the students and faculty in extension activities of NSS, NCC, YRC and other NGOs? How often and in what roles are they involved?**

Sona College has been promoting the participation of students and faculty in extension activities like NSS, NCC, YRC, RRC and NSO for the past many years.

**NSS:** Started in 2002, the NSS activity has three units of 100 students each with three faculty being in charge of them as NSS Officers. The 300 students comprise 150 first-year and 150 second-year students, who are selected on the basis of a written test, an interview and a 6-month probation designed to determine their interest in joining and working as NSS volunteers. All selected volunteers participate in pre-scheduled NSS activities, which mainly involve educating and assisting rural people in nearby villages to lead a better quality of life, and an annual one-week camp at a village, medical camps, blood donation and other social service activities.

**NCC:** The NCC Wing was initiated in 2005 and at present it has two wings, a boys-unit (Army Signals) and a girls-unit (Army Battalion), each with 50 cadets selected by Indian army officers on the basis of their physical fitness. A male faculty and a female faculty of the college are appointed as Officers in charge of the units respectively, initially as ‘caretakers of the units’ for one year, and then as civilian NCC Officers, ranked as Lieutenant, after rigorous training at an Army camp in Nagpur for the male officer and at Gwalior for the female officer. Promotion to higher ranks like Captain, Major is based on further rigorous training. The cadets are to participate in 40 parades a year and in two camps, one each for the B-Certificate and C-Certificate are compulsory components of the training.

**YRC and RRC:** There is one unit each of the YRC and RRC with 100 volunteers each. Students are selected as for the NSS and trained through several workshops like health-and-medical awareness, road-traffic and road-sense awareness, fire safety awareness, social responsibility awareness, etc. Many of the volunteers are involved in peer-education as a



part of the training with senior students training their junior counterparts. The RRC volunteers are primarily involved in AIDS awareness and blood donation activities. A faculty, appointed as Vice-Chairman of both of these associations, has the responsibility of planning and organising these activities.

The college has instituted the Best NCC Female/Male Cadet Award and Best NSS/YRC/RRC Volunteer Awards to encourage voluntary participation, the awards being presented to the winning students on the Annual Day of the college along with cash prizes.

**NSO:** The college provides extensive facilities and encouragement on the campus for students to participate and excel in sports and games. The college has been winning the ‘Overall Champion’ award in inter-college sports meets for the past few years. All of Sona’s athletes and sportspersons are automatically inducted into the NSO. There are intra-mural sports competitions for the staff too and they participate in large numbers to hone their talent. A Physical Director is appointed to plan and execute all sports activities and to encourage high student and staff participation. Special coaches are also appointed to train students.

#### **3.4.4 Is there any research or extension work to ensure social justice and to empower under-privileged sections in particular, women and children?**

The training initiatives undertaken by the Centre are focused to technical skill development of the individual, women in particular. In order to initiate women empowerment, we have designed women empowerment and economic development programmes, in association with Corporate

and welfare organizations to provide integrated services (empowerment initiatives, career guidance, skill development, entrepreneurship exposure, and employment support and life education). To ensure the possibilities, we have applied for selection as the Vocational Training Provider under Modular Employable Skills (Skill Development Initiative Scheme of Ministry of Employment & Training, Govt. of India.) To fulfill the above, we have chosen the following sectors exclusively for the women and the economic development.

The programmes are as follows:

- textiles
- computer
- Hospitality
- Retail
- Entrepreneurship

#### **3.4.5 What is the impact of extension on the community? Specify.**

Our Centre focuses mainly on rural community, youth in particular. Through the initiative, of Extension and collaboration with other welfare organizations, we have achieved the desired result of 70% of the participants in all programmes were settled with economic development sources.

So the impact of our extension activity on community is progressive and widely known to the public.

#### **3.4.6 Does the college receive awards/recognition for extension activities?**

All the programmes are offered in good manner for the benefit of people in and around Salem. A programme on women empowerment and economic development by arranging Skill Development programme on Multi skilled

Garment Technician Training in collaboration with Steel Authority of India Ltd, Salem Steel Plant was instrument for SAIL, Salem Steel Plant for being honored with Corporate Social Responsibility Award for the year 2007-08 by the Govt. of Tamil Nadu. In short, all our programmes are in good demand in the community, as a whole.

### **3.5 Collaborations**

#### **3.5.1 How many linkages does the institution have, for research and extension?**

More than 140 Industries and Organizations

#### **3.5.2 List the organizations and the nature of linkage and expected outcomes.**

- VIKRAM SARABHAI SPACE CENTRE (VSSC), Thiruvananthapuram
- ISRO Inertial Systems Unit(IISU), Thiruvananthapuram
- Infosys (Campus Connect), Bengaluru
- NASSCOM, New Delhi
- IBM India ltd., Bengaluru
- CISCO Networking Local Academy, Amrita Institute of Technology, CBE
- Oracle Corporation India Ltd. Bengaluru
- Sun <sup>tm</sup> Academic Initiative, Bengaluru
- British Council, Chennai (Nodal Dote-BEC centre)
- CYPRESS Semiconductor Corporation, Bengaluru
- CHECKTRONIX INDIA Pvt. Ltd, Chennai
- Keane, Bengaluru
- Pramati Technologies Ltd., Hyderabad

- Streta IT Solution Pvt. Ltd., Chennai
- Nuratech Inc. Chennai
- System Level Solutions Pvt Ltd, USA , along with ENIXS, Trichy
- Parthys Patent Eagle, Chennai
- Varalakshmi starch industries ltd. Salem
- Tamil Nadu Sago and Starch Manufacturers Welfare Association, Salem
- KMC Construction ltd, Bengaluru
- AKR Parcel Service Pvt Ltd, Salem
- Prem Textiles International, Karur
- Jasan Industries, Salem
- JSW Steel Limited, Salem
- The Central Institute of Indian Languages (Ministry of HRD, Govt. Of India), Mysore
- Mukesh & Associates, Salem
- Salem Steel Plant, Salem
- UNIVERSITY OF NOTTINGHAM, Nottingham – NG7 2TU, U.K
- Assumption University, Bangkok, Thailand
- ATMOSPHERIC SCIENCE DEPARTMENT, Cochin University of Science and Technology, Cochin
- RADIO AND ATMOSPHERIC SCIENCES DIVISION, National Physical Research Laboratory, New Delhi
- NIGERIAN METEOROLOGICAL AGENCY, PMB 1215 Oshodi Lagos, Nigeria
- INDIRA GANDHI ATOMIC RESEARCH CENTRE, Chennai
- MEGAWIN SWITCH GEAR, Salem
- ISRO / DST - Collaborating with Indo-US E-learning Initiative by Govt. of India

Nature of Links: Collaborative Research, MOUs, Mutual Visits etc. based on mutual benefits and mutual sharing.

Expected Outcomes: Innovations, Patents, Joint Publications, Trained Personnel

### **3.5.3 How does the linkage promote**

#### **a) Curriculum development**

Industrial trends and focus areas are considered while developing curriculum by inviting Industrial Experts and Domain Experts. This ensures that industrial needs are given due weightage. Board of Studies has members from industries which is another way to link the industry for curriculum development.

#### **b) Internship**

The students are sent for internship to various industries. This gives exposure and opportunities to the students to interact with real time industrial operations and setups.

#### **c) ‘On-the-job’ training**

This is a part of industrial visit for projects and implant training. Apart from industrial visits, students spent few months at industry while doing final semester projects.

#### **d) Faculty exchange and development**

Faculty exchange and development programs are undertaken as it the one of the aim of having MOUs with industries. Many a time faculty is provided with opportunities to get trained in industries.

**e) Research**

Research is main collaborative activity between industry and institution. College has record of joint publications and visits to various organizations and universities to undertake joint and collaborative research.

**f) Consultancy**

Consultancy functions in two ways. College provides consultancy services to other departments and organizations by virtue of have good infrastructure and learned faculty. College also seeks consultancy from other organizations and experts to improve our own strength and functioning

**g) Extension**

Extension services are provided by various departments with the help of coordination of Continuing Educations Department. There are number of areas where college has shown good potential and strength to provide extension services through well established linkages.

**h) Publication**

Publications are undertaken primarily by learned faculty and research staff with good contribution from students as well. Linkages with other industrial and research organizations certainly helps in publications as college faculty and students have opportunities for industrial exposure through linkages.

**i) Student Placement**

Linkages with industry is definitely helpful for placing more number of students as the link is first established. Industry gets fist hand

information of college strength and infrastructures through links. Prior exchange of information and initial impression pay well in the form of placement.

**3.5.4 What measures has the institution adopted, to enhance the quality of Research, Consultancy and Extension during the last five years?**

- (i) Signed many MOUs with various industries and organizations including academic institutions.
- (ii) Invited many industrial experts and domain experts for interactions with faculty and students at college. This has helped to know the latest trends in industrial research. The college has tuned itself to the industrial trends and focus areas of research.
- (iii) The college has also signed MOUs with foreign Universities such Wayne University, Michigan, Syracuse University, USA etc.

**3.6 Best Practices**

**3.6.1 Describe the best practices in research, consultancy and extension with reference to promotion of research / publication output / consultancy and extension activities / collaborations?**

The following are best practices in research, consultancy and extension

Faculty doing research has reduced teaching loads and freedom for selecting research area as per their specialization or interests.

- i) Faculty doing research and staff has provisions for sharing revenues generated through R&D and Consultancy.

- ii) Faculty is encouraged to participate in conferences and symposiums at national and international level. Their expenses are covered by grants from management
- iii) Annual awards like best research paper, best R&D activities, best innovation etc. are conferred to the Faculty doing research faculty and staff.
- iv) Faculty doing research and supporting staff have freedom to undergo training at various institutions/organizations/industries



## **Criterion IV: Infrastructure and Learning Resources**

### **4.1 Physical Facilities**

**4.1.1 How well endowed is the college in terms of physical infrastructure (classroom, administrative buildings, staffroom, transport, water, power supply, etc., to run the academic programme) Enclose the master plan of the college campus indicating the existing buildings and the projected expansion in the future?**

ANS: Sona has excellent infrastructure facilities, which include

- Bright and airy classroom.
- State –of-the art laboratories.
- Industry standard training centers
- Well stacked library.
- Sophisticated computer centers
- Homely hostel facilities
- Multimedia language laboratory.
- Advanced R&D Centers
- Continuing Education centre and so on

The master plan of the college campus indicating the existing buildings and the projected expansion in the future is enclosed.

#### **4.1.2 What are the infrastructure facilities available for:**

##### **a) Academic Activities:-**

- The classrooms are well ventilated, furnished and provide sufficient learning and teaching comfort.
- All types of teaching aids – ranging from the ubiquitous overhead projector to computer based teaching packages – are available in every department. These give the classroom ambience a professional touch. All the classrooms are provided with chalk boards, projection facilities, notice boards, curtains, dustbins, acoustically treated walls, good flooring etc.,
- The library has an excellent collection of books, journals and other learning materials. Separate collections of reference books, standards, bound volumes of journals, technical reports, theses, video cassettes and CDs are available.

##### **b)Co-curricular activities:-**

- The college has two auditoria, six seminar halls, one open air theatre and one amphitheatre, to organize student development programmes, besides seminars, conferences and a number of college functions.
- Sona addresses all the needs of the students like permitting them to present papers in other colleges, providing allowances for their travel and food.

##### **c) Sports:-**

- SONA has stupendous sports facilities, both indoor and outdoor, for maintaining physical fitness and health of students and staff.

- An athletics ground with a standard 400m track, a modern gymnasium, a Yoga centre, Semi Olympic size swimming pool, mini golf course, Billiards are the major highlights of SONA's sports facilities.
- Tennis, Basket Ball, volleyball, Ball Badminton and shuttle courts are also provided.

**d) Laboratories:-**

- The laboratories are quite roomy and offer a welcome setting for practical learning sessions.
- The equipment are of industry standard and the latest available in the market.
- Training in the practical sessions is always focused on current industrial needs.
- Apart from the equipment available for curriculum, many other equipment are provided exclusively for research and development.

**e) General computer education:-**

- SONA has 18 sophisticated computer centers to impart the latest technology in computing.
- 1800 computers are installed in addition to the 80 laptops with a system to student ratio of 1:2.5.
- SONA has 8 Mbps leased line internet connectivity.
- Computers are also installed at Boys' and Girls' Hostels
- C++ and Java lab, system programming lab, virtual programming lab, multimedia lab, Networking lab, operating systems lab are some of the laboratories enriching the knowledge of computers.

**f) Other activities:-**

**Language laboratory;-**

- SONA has an excellent multimedia language lab to help students enhance their language skills, with interactive softwares.
- SONA is the nodal centre for offering Business English certificate course.
- SONA has the facilities for receiving the live lectures delivered by eminent professors, through satellite.
- SONA has a continuing education centre which offers various value added courses to the students, during weekends and vacations.
- SONA also has various training centers like
  - IBM centre of excellence
  - LINUX training centre
  - CISCO
  - Infosys campus connect programme.
  - WIPRO 10X.
  - CAD/CAM Centre.
  - Multimedia
  - PCB design and fabrication etc.,

**4.1.3. Has the institution augmented the infrastructure to keep pace with its academic growth? Specify the facilities and the amount spent during the last five years.**

Yes. The institution augmented the infrastructure to keep pace with the academic growth. Every year a new block is added. Independent blocks are

provided for each programme. Every year, new equipments are added in the laboratories.

**Amount spent during last five years:-**

2006 – 2007 – 17.13 Lakhs

2007 – 2008 – 41.01 Lakhs

2008 – 2009 – 17.92 Lakhs

2009 – 2010 – 20.59 Lakhs

2010 – 2011 – 40.00 Lakhs

**4.1.4 Has the institution provided facilities like common room, wash / restroom for women students and staff?**

Yes, facilities are provided for women Staff and Students like common room, wash/rest Room, etc.,

**4.1.5 What are the steps taken for optimal utilization of infrastructure facilities?**

- Continuing Education classes are conducted in the classrooms in the evenings (5.30pm to 7.30pm).
- Research works are carried out in the laboratories, when there are no practical sessions.
- Testing and consultancy works are also carried out in the laboratories, when there are no practical classes.
- Library is kept open from 8.00am to 8.00pm on all working days and from 10.00am to 5.00pm on Sundays & Holidays.
- Computer centers are kept open upto 8.30pm

- All the indoor and outdoor sports facilities, are effectively utilized by the students and staff.

#### **4.1.6 What are the facilities available for differently abled students?**

- The differently abled students are mostly accommodated in the ground floor.
- Wheelchairs are available at the entry of buildings.
- Ramp with handrail is provided at the entrance of blocks.
- Separate toilets with EWC are provided.

### **4.2 Maintenance of Infrastructure**

#### **4.2.1 What is the budget allocation for the maintenance of -**

a.	Land	-	3 Lakhs
b.	Building	-	40 Lakhs
c.	Furniture	-	20 Lakhs
d.	Equipment	-	15 Lakhs
e.	Computers	-	20 Lakhs
f.	Transport	-	12 Lakhs
	<b>TOTAL</b>	<b>-</b>	<b>110 Lakhs</b>

#### **4.2.2 How is the budget optimally allocated and utilized?**

Budget is allocated to each category, based on the previous year experience and also based on the importance and need for the services.

#### **4.2.3 Are there staff appointed for maintenance and repair? If not, how are the Infrastructure facilities, services and equipment maintained?**

- For each of the above category, staff members deputed for carrying out the maintenance.
- Staff members of the Civil Engineering Department take care of the land and Building maintenance.
- Workshop Superintendent and his team take care of the furniture maintenance.
- Lab technicians and lab assistants of every laboratory look after the maintenance of equipments. They are guided by the lab-in-charge and the HOD.
- A Staff Member of Mechanical Engineering Department is deputed as in charge for carrying out activities of transport, with 6 drivers working under him.

#### **4.2.4 How is the infrastructure optimally used?**

The Staff Members in-charge of various activities ensures that the infrastructure is optimally used.

#### **4.2.5 What is the mechanism for maintenance of computer, other network facilities, Library and information facilities.**

- A separate team called as “Computer Maintenance Group” consisting of 12 technicians/Engineers headed by a Professor of Information Technology is executing all the maintenance works, networking, installation of softwares, antivirus softwares, etc., for the entire Institution.

- Librarian, assistant Librarian, library assistants take care of the Maintenance of the Library and information facilities

### **4.3 LIBRARY AS A LEARNING RESOURCE**

#### **4.3.1 How does the library ensure access, use and security of resource?**

Barcode technology is used for entry, transaction, issues etc.,

#### **4.3.2 What are the facilities available in the library? (Computers, Internet, Reprographic facilities etc.)**

- 28 computers are installed in the library and all are connected to internet.
- Other facilities available, are
- Lending Service.
  - Reference Service.
  - Current Awareness service
  - E- journal[full-text] Access
  - Internet service.
  - Information Retrieval.
  - Reprography Service
  - Referral Service.
  - SDI Service
  - Inter library loan
  - Media Center
  - Newspaper clippings
  - Orientations



#### **4.3.3 How does the library collection cater to the needs of the users?**

- Most of the titles provided in the library are popular text books and they are widely used by all the students.
- Students are encouraged to refer many books for the preparation of the notes for their paper presentations, project work etc.,
- Journals containing research articles are widely referred by faculty and students, carrying out research works.

#### **4.3.4 What is the stock of books in the library? (titles)**

21065

#### **4.3.5 Furnish the information regarding the number of journals subscribed by the institution?**

295

#### **4.3.6 How does the library ensure purchase and use of current titles, important Journals and other reading materials?**

- Suggestions are collected from the advisory committee, Senior Professors of all the departments, industry experts etc., for subscribing / purchasing journals /books.
- New arrivals are prominently displayed in the entrance of the library.
- Catalogs of popular publishers are circulated to all the departments.

#### **4.3.7 If the library has an archives section, to what extent is it used by the readers and researchers?**

YES. Archives section is widely used by the readers and researchers.

**4.3.8 How are on-line and Internet services in the library used by students and faculty? Specify the hours and frequency of use?**

Online and internet services in the library are mostly used by the Students, since the faculty have their desktops connected to the internet.

Working hours:-

**8.00am to 8.00pm – Monday to Saturday.**

**10.00am to 5.00pm – on Sundays & Holidays.**

All the 24 systems in the library, connected to the internet, are fully used.

**4.3.9 Are the library services computerized? Does the institution make use of INFLIBNET/ DELNET/ other facilities? Give details.**

- Yes. All the library services are fully computerized using barcode technology.
- Sona library is a member in INDEST, DELNET & IIM (B).
- The library uses auto Lib OPAC (online public access catalog), permitting users to search the library's online catalogue by author name title, subject and keywords.

**4.3.10 How many days is the library kept open in an academic year? 345 How long is the library kept open per day –  
During normal working days?**

8.00 am to 8.00 pm – Monday to Saturday,

10.00am to 5.00pm – on Sundays and Holidays.

**During examinations?** There is no time limit for library. It will be kept open till the last student in the library leaves.

**4.3.11 Does the library have an Advisory Committee? What are its functions?**

YES. There is an advisory committee for the library. This committee focuses and addresses all aspects of the development of library.

**4.3.12 Amount of money spent on new books, journals during the last five years?**

**2006 – 2007 - 17.13 Lakhs**

**2007 – 2008 - 41.01 Lakhs**

**2008 – 2009 - 17.92 Lakhs**

**2009 – 2010 - 20.59 Lakhs**

**2010 - 2011 - 40.00 Lakhs**

**4.3.13 How does the library motivate students/ teachers to read existing and new arrivals?**

- New arrivals are prominently displayed at the entrance of the library.
- Better ambience is created inside the library for attracting more faculty and students to the library.
- “Best reader award” is given every year to a staff / students, who uses the library to the maximum extent.

**4.3.14 What are the special facilities offered by the library to the visually challenged and physically challenged person? How are they used?**

- At present, no facility is available. SONA plans to implement the same in the future.

- Library assistants help the physically challenged persons in issuing and receiving books.

**4.3.15 List the infrastructural development of the library over the last five years?**

- NPTEL Video server is established.
- Anna – Edusat facilities created
- Indo – Us Programme launched

**4.3.16 Describe various information services provided by the library?**

**(clipping, reference, etc.,)**

- Circulation of books and journals
- Display of current events/information
- Bibliographic compilation
- E-Journal (Full-text) access.
- Reference
- SDI Service
- Reprography
- Computer and Printing
- Internet
- Digitalization
- Inter-library loan
- User orientation /information literacy
- INFLIBENT / DELNET.

**4.3.17 Describe steps taken for making the library user friendly.**

- More copies of popular books are made available.
- OPAC facility makes the job easier for users.

- Indexed stacking helps the user to reach a book quickly.
- Special book bank facility for SC\ST students
- Electronic bar coding simplifies the entry/exit procedures.
- Reprographic facilities are available.
- Flexible working hours of the library.
- Good ambience created inside the library.

#### **4.4. ICT AS A LEARNING RESOURCE**

##### **4.4.1 How is the computer facility extended to all faculty & students?**

- Computers are provided at every faculty Room. HODs, Professors and faculty doing R&D are given with separate computers. The entire campus is networked and internet connectivity is made available to all computers.
- Loans are arranged for the purchase of laptops for the students. In addition to the central computer centre, students can access computers in their own department and in library.

##### **4.4.2 How is the faculty facilitated to prepare computer aided teaching / learning materials? What are the facilities available in the college for such efforts?**

- Sona has a multimedia research centre called “Sonaversity”, which publishes computer based text books for many courses.
- A CD will be available with the text book, for showing animations for understanding the concepts.
- The content for these text books and CDs is provided by our faculty members.

#### 4.4.3 How many computers are there in the college?

1851

#### 4.4.4 Is there a central computing facility? How favorable are its timings, access and cost to both students and faculty?

Yes, The Central Computer Centre is open between 8.30am and 8.00pm.

Students and staff can make use of the facility for any kind of academic work free of cost.

#### 4.4.5 How many departments have computers of their own? Specify the numbers.

FIRST YEAR LAB	-	153
SCIENCE	-	29
MATHS	-	10
ENGLISH	-	71
CIVIL	-	31
ECE	-	160
MECH	-	121
EEE(UG)	-	295
EEE(PG)	-	62
CSE/IT(UG)	-	391
CSE(PG)	-	70
FT	-	44
MBA	-	71
MCA AND MIS	-	159
SONAVERSITY – I	-	59
SONAVERSITY – II	-	24
LIBRARY	-	44
ADMIN	-	48
HOSTEL	-	9
<b>TOTAL</b>	<b>-</b>	<b>1851</b>

#### **4.4.6 How are the computers and its accessories maintained in the department?**

- A group of 12 technicians under a Senior Professor, is working exclusively for the computer maintenance.
- The Computers, printers, networking equipments and other accessories are periodically cleaned and checked for their proper operation.
- Breakdown Maintenance is carried out on computers and accessories, when they fail to operate as per the requirements.
- Preventive Maintenance is carried out on all the UPS units in the Campus.
- Above maintenance works are carried out in coordination with department level technicians.
- Antivirus softwares are installed in all the systems.

#### **4.4.7 What is the output of the various departments in developing computer aided packages for their discipline?**

Faculty members of different departments contribute the contents for various text books, published by our multimedia research unit “Sonaversity”.

- Course materials and lab manuals for various courses are prepared by our faculty members and printed at “Sonaversity”.

#### **4.4.8 Describe the nature of internet services available to students and faculty.**

- An 8 Mbps leased line internet bandwidth is made available to the staff and students of the entire campus.

- Faculty and Students can do any kind of academic related work using the internet during the working hours.
- Entire campus is being made Wi-fi
- An intranet MIS facility is available for the staff members to monitor the academic progress of the students.

**4.4.9 How are the institutional website and web-based facilities used and updated for the benefit of teachers, students and other stakeholders?**

- The College has a website [www.sonatech.ac.in](http://www.sonatech.ac.in) wherein the complete details of the institution with respect to admission, courses, infrastructure, R&D activities, industry institute initiatives etc., are provided.
- Details about the Alumni are separately published in a different web portal.
- The school of management has a website of its own.
- There is also a website, wherein the parents can check the weekly test marks of their wards.
- Individual E-mail IDs with Sonatech Domain Name are given to most of the staff members.

**4.5 Other Facilities**

**4.5.1 Are there hostel facilities available on the campus?**

Yes. Separate hostel facilities available for both Boys and Girls

**4.5.2 Are there hostels for women students?**

Yes. There are five hostels for Women students.



**4.5.3 How many students stay in the hostel? How many rooms are there in the hostel? Is the accommodation sufficient to meet the demand?**

At present, 800 Boys and 850 Girls stay in the Hostels.

For boys, 320 rooms are available.

For Girls, 240 rooms are available

Every year, new Hostels are constructed to meet the demand.

**4.5.4 What facilities are provided in the hostel?**

- Students of all the hostels are provided Library, Computing, Internet, Gymnasium facilities.
- Washing machines are provided in all the wash rooms of all the Blocks.
- Rooms are furnished with study table, chair, cot and fan.
- Sona Hostels provide hygiene vegetarian food.
- Televisions and home theatre systems provided.
- Phones are provided at every floor.
- Newspapers and magazines are circulated.

**4.5.5 Does the institution have a health centre?**

Yes. Sona has a health Center. The health centre of Sona has a full-fledged dispensary functioning in the morning from 11.00 am to 1.00 pm and in the evening from 4.30pm to 6.00pm. More than 500 students and 50 staff members derive the benefits of this facility every month.

**4.5.6 What health care facilities are provided by the health center?**

- Consultation, Medical checkup & treatment provided.
- Examination room and rest room facilities available.

- Mini – Lab for blood sugar Test available.
- Physiotherapy treatment provided to the needy Students.
- Affiliated to three Multi-specialty Hospitals.
- Two doctors (including a lady doctor) and a nursing maid will be on duty at Health Centre.

#### **4.5.7 Does the institution have canteen facilities?**

Yes. Sona has four cafeteria that function well to serve the students and Staff Members.

#### **4.5.8 Does the institution have a student centre?**

Yes. The Students centre has a swimming pool (Semi Olympic size), music club hall, Yoga/ Meditation hall, Billiards room, Stationary/Fancy Stores, Cafeteria, Indoor games, gymnasium etc.,

#### **4.5.9 Does the institution have a Placement Centre?**

Yes. Sona has a Placement, Training and Welfare (PTW) Cell, functions with the primary aim of placing students in top-notch companies, even during the course of their study. Prior to placement, the PTW cell takes considerable efforts to train the students to come up to industry expectations.

The objectives of the PTW cell are manifold. They include:

- Developing the communication skills of the students.
- Developing their soft skills for facing the competitive interviews.

- Motivating them to develop their overall personality in terms of career planning, goal Setting and reskilling, qualities that will stand them in good stead even during their working lives.
- Motivating students to go for higher studies and guiding them to take competitive Exams such as CAT, GATE, TOEFL, GRE. GMAT and IELTS.

**4.5.10 What are the physical and infrastructure facilities available for the sports and physical education centre?**

**OUTDOOR GAMES AND FACILITIES**

<b>S. No</b>	<b>FACILITIES</b>	<b>No.</b>
1	Standard Track and Fields Standard 400-m Track High Jump / Long Jump pits	1
2	Football Field	1
3	Hockey Field	1
4	Cricket Field	1
5	Basket-Ball Court	1
6	Volley Ball Court	3
7	Handball Court	1
8	Badminton(shuttle) Court	4
9	Tennikoit Court	1

10	Ball-Badminton Court	2
11	Tennis Court	1
12	Cricket Net	1
13	Putting Green (Small Golf Course)	1

### **INDOOR GAMES AND FACILITIES**

<b>S.No</b>	<b>FACILITIES</b>	<b>No.</b>	<b>REMARKS</b>
1	Swimming Pool	01	Half Olympic-Size (8 Lanes)
2	Yoga and Meditation Centre	01	
3	Gymnasium	01	Equipped with modern equipment and LCD TV.
4	Billiards Table	02	
5	Table Tennis Tables	07	
6	Carrrom Boards	04	
7	Chess Boards	10	
8	Badminton Courts	02	
9	TV with DVD, Cable connection	01	
10	Library	01	CDs on coaching available

**4.5.11 Does the institution have a workshop / instrumentation centre? What are the physical facilities available in the centre?**

Yes. Sona has a Workshop/Instrumentation Center. Facilities available in the center, are listed below:

<b>S.No</b>	<b>Name of the equipment</b>	<b>Quantity available</b>
1	Jigsaw	1 No
2	Planner (80mm)	2 Nos
3	Circular Saw	2 Nos
4	Hammer Drill	2 Nos
5	Welding Transformer	5 Nos
6	Welding Both	5 Nos
7	Hand Shearing Machine	1 No
8	Gas Welding Set	1 No
9	Pillar Drilling Machine	1 No
10	Bench Grinder	1 No
11	Angle Grinder	1 No
12	Air Blower	1 No
13	Earth Furnace	2 Nos

<b>S.No</b>	<b>Name of the equipment</b>	<b>Quantity available</b>
14	Assorted components for plumbing consisting of metallic pipes, plastic pipes, flexible pipes, couplings, unions, elbows, plugs and other fittings.	15 Sets
15	Carpentry vice (fitted to work bench)	15 Nos
16	Standard woodworking tools	15 Sets.
17	Models of industrial trusses, door joints, furniture joints	5 Each
18	Arc welding transformer with cables and holders	5 Nos.
19	Welding booth with exhaust facility	5 Nos.
20	Welding accessories like welding shield, chipping hammer, wire brush, etc	5 Sets
21	Oxygen and acetylene gas cylinders, blow pipe and other welding outfit.	2 Nos.
22	Centre lathe	2 Nos.
23	Hearth furnace, anvil and smithy tools	2 Sets.
24	Moulding table, foundry tools	2 Sets.
25	Study-purpose items: centrifugal pump, air-conditioner	Each One
26	Assorted electrical components for house wiring	15 Sets
27	Electrical measuring instruments	10 Sets
28	Study purpose items: Iron box, fan and regulator, emergency lamp	Each One
29	Soldering guns	10 Nos.
30	Assorted electronic components for making	50 Nos.
31	Small PCBs	10 Nos.

32	Multimeters	10 Nos
33	Study purpose items: Telephone, FM radio, low-voltage power supply	2 each.

**4.5.12 Has the institution drawn a master plan for campus development?**

Yes, A master plan indicating the future plan has been prepared.

**4.5.13 What other infrastructure facilities like conference rooms, common rooms, staff rooms, auditorium, parking sheds etc., are available in the college?**

- Sona has two open air auditoria, two indoor auditoria, five seminar halls and four Conference Rooms.
- All these halls are provided with public address systems & LCD Projectors.
- Sona also has an excellent language lab to help students enhance their language skills.
- Sona has sufficient numbers of Staff cabins, common rooms, parking sheds etc.,

**4.5.14 What are the communication facilities (Telephone, STD, ISD) available on campus?**

Facility	Quantity
EPABX System Ericsson BP250	1 Exchange with 12 extension cards (extendable) and 1 PRI card
Intercom numbers	160

Outgoing facility	30 channels
Mobile phones	30
Coin-operated telephone boxes	7
Fax lines	4
UHF phones for securities	8

**Note:** All the intercom numbers have the direct inward dialing facility.

#### 4.5.15 Describe the facilities like transport, electricity and water supply.

##### **POWER:**

<b>POWER LEVEL</b>		
<b>Campus</b>	<b>Sanctioned Demand</b>	<b>Details of Service</b>
College	500 KVA	High Tension service – 1.
Hostels	269 KW	Low Tension service – 5.
<b>POWER BACKUP</b>		
<b>Campus</b>	<b>Total Capacity</b>	<b>Details of DG sets</b>
College	885 KVA	380 KVA – 2, 125 KVA - 1
Hostels	330 KVA	125 KVA -1, 82.5 KVA– 2, 40 KVA-1

##### **TRANSPORT:**

- Sona College is easily accessible by public transport facilities.
- Bus Pass is provided to the students by the Govt. of Tamil Nadu.
- College has two mini-buses and five cars.
- The buses are used for industrial visits, NSS, NCC and YRC Activities.



## **WATER SUPPLY**

- Potable protected water supply is ensured for all the Students and Staff. Water Purifiers are placed at important locations of the college and Hostels.

### **4.5.16 Describe the nature of landscape developed including approach roads, garden etc. to contribute to ambience.**

- Excellent landscape developed in the campus.
- 3200 trees of various species are planted inside the campus.
- Non – slushy cement concrete paver blocks with open joints, for the percolation of rain water, have been laid for the approach roads to different buildings.
- About 50% of the total campus area is developed as lawn/garden.

### **4.6 Best Practices in the development of infrastructure and learning resources.**

#### **4.6.1. Describe the best practices for the development of infrastructure and learning resource adopted by the college with reference to physical facilities and its maintenance / library as a learning resource / ICT as a learning resource and other facilities to create learning and ambience?**

##### **Physical facilities and their maintenance**

Mr. Prasad Babu will be giving the response to this part (in consultation with the Secretary)

##### **Library as a learning resource**

- The Central Library houses a variety of resources including a sizable number of textbooks, reference books, technical journals,

books/magazines for general reading, CDs on selected technical topics and video lectures on key management topics.

- Twenty-four computers with internet facility are available in the library and students are allowed to use them during their non-class hours.
- Books/references not available in the library are procured through the DELNET facility.
- Students are permitted to keep borrowed books for as long as they wish; there is no specific time-period for return of the books. Having a stock of additional volumes of frequently used books ensures that every student who needs a book gets one.
- All of the library transactions are user-friendly and performed electronically and instantaneously.
- The library has adequate and comfortable furniture for students wishing to read there and it is also free from noise or disturbances.
- The library is open on all week days from 8.00 am to 8.00 pm and on Sundays from 9.00 am to 5.00 pm.
- Besides the above, every department has its own library with books and reference books.

All of the above combine to make the library a very useful learning resource on the campus.

### **ICT as a learning resource**

As stated in Section 2.3.4, Information and Computer Technology is used as a remarkable learning resource on the campus through the following facilities:

- The college's Learning Resources Development Centre (LRDC called Sonaversity) has come out with around 75 Computer-Based

Training/Teaching (CBT) packages for most of the courses of the UG programmes. The CBT packages are used by teachers in the class and by students (at home).

- Special expert lectures are beamed to students via the EDUSAT connected with IIT Bombay, the INDO-US satellite program and Anna University, Coimbatore
- WEBCAST / WEBINAR programmes in collaboration with Infosys Technologies are used to enhance student learning of topics of current importance.
- Amrita's A-VIEW (Virtual Interactive E-learning World) facility: special expert lectures on engineering and technology are presented to student groups in collaboration with IIT-Bombay and Amrita University
- Video lecture tapes/CDs/DVDs of lectures by renowned academics from IITs, Harvard University, Stanford University, etc on emerging topics in the areas of engineering, technology and management, which can be used for large groups (in a seminar hall) or for small groups with a CCTV and cordless headphones (in the Central Library itself)
- The institution is in the final stages of installing a video-streaming facility by means of a 1.5-Terabyte NPTEL hard disc, consisting of video lectures by experts on a whole range of engineering and technology courses via an intranet that both students and staff can access anywhere on the campus.

## Criterion V: Student Support and Progression

### 5.1 Student Progression

#### 5.1.1 How does institution monitor student progression?

The students intake during the first year of establishment (1997-98), was 160. The present year (2010-11) AICTE approved intake is 1224 apart from 10% Tuition Fee Waiver Scheme, 10% Lateral Entry Scheme and 15% Foreign Nationals under supernumerary.

Steadily the year-wise intake and the campus strength of the institution are increasing. The present campus total strength is 4490.

The maximum campus strength is planned to limit to 5000.

#### 5.1.2 What is the student strength of the institution for the current academic year? Give the data gender-wise, state-wise and nationality-wise.

Student strength for the academic year 2010-11 (Gender-wise)

Degree	Year 1		Year 2		Year 3		Year 4		Total	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
BE/ BTech	494	401	553	391	490	399	525	299	2062	1490
ME	79	63	84	60					163	123
MB	90	78	64	63					154	141
MC	68	52	66	55	62	54			196	161
Total	731	594	767	569	552	453	525	299	2575	1915

Student strength for the academic year 2010-11 (Nationality and State-wise)

Degree	Year 1			Year 2			Year 3			Year 4			Total		
	TN	OS	ON	TN	OS	ON	TN	OS	ON	TN	OS	ON	TN	OS	ON
BE/ BTech	821	2	72	909	7	28	850	5	34	780	7	37	3360	21	171
ME	138	4	-	141	3	-							279	7	0
MB	149	1	18	118	-	9							267	1	27
MC	120	0	-	119	-	2	116	-	-				355	0	2
Total	1228	7	90	1287	10	39	966	5	34	780	7	37	4261	29	200

**OS- Other state, ON- Other Nation,**

**5.1.3 Details of the last two batches of students and their profile (General, SC,ST, OBC etc.) prefixing the Socio-economic profiles also.**

Degree	Year 2009-2010					Year 2010-11				
	OC	BC	MBC	SC	ST	OC	BC	MBC	SC	ST
BE/ BTech	668	1702	597	329	14	699	1827	650	360	9
ME	17	131	66	43	-	31	161	52	42	-
MBA	35	58	16	11	1	62	151	47	15	3
MCA	7	111	43	14	-	26	202	98	30	-
Total	727	2002	722	397	15	818	2341	847	447	12

**OC – Open category (General), BC – Backward community,**

**MBC – Most Backward Community, SC – Schedule Caste,**

**ST – Schedule Tribe**

**5.1.4 What percentage of the students on an average progress to further studies? (UG to PG and PG to Research) Give details for the last five years.**

The percentage of UG students moving for PG degree is about 10-15%.

The percentage of PG students moving for Research is about 25-30%.

**5.1.5 What is the dropout rate for the different years after admission?**

The dropout rate after the admission is below 1 %.

In 2009-10, after the admission of 1348 students, 12 students have discontinued the course. The percentage dropout is 0.9%.

In 2010-11, after the admission of 1336 students, 11 students have discontinued the course. The percentage dropout is 0.8%.

**5.1.6 What proportion of the graduating students have been employed for the last five years? Provide placement record for the last five years.**

<b>Year</b>	<b>Students Registered for Placement</b>	<b>Students Placed</b>	<b>Placement %</b>
2006	323	200	62
2007	466	326	70.3
2008	542	401	74
2009	500	320	64
2010	541	402	72.63

**5.1.7 How many students appeared/ qualified in UGC-CSIR-NET, SLET, IAS, GATE/ CAT/GRE/TOFEL,GMAT/Central/ State services Competitive Examinations. (last five years)**

Academic Year	Civil		Mech		EEE		ECE		CSE		IT		FT		MBA		MCA	
	A	Q	A	Q	A	Q	A	Q	A	Q	A	Q	A	Q	A	Q	A	Q
2005-06	-	-	32	02	08	03	06	02	07	06	12	02	-	-	-	-	16	-
2006-07	15	11	31	04	08	-	21	07	03	01	10	01	-	-	-	-	10	-
2007-08	10	08	57	03	11	03	31	01	10	09	13	02	-	-	-	-	32	-
2008-09	08	06	56	03	22	05	31	04	03	03	14	03	04	04	01	-	36	02
2009-10	08	05	73	04	40	05	63	-	15	05	10	02	03	03	02	02	40	03

A – Appeared Q – Qualified

**5.1.8 Give comparative picture of institutional academic performance in relation to university average.**

The University average is not available, however the Institution Pass Percentage and the number of Rank holders are listed below.

Academic Year	Pass Percentage	Number of Rank holders
2005-06	83	21 with 2 Gold Medal
2006-07	87	18 with 3 Gold Medal
2007-08	91	28 with 2 Gold Medal
2008-09	95	12 with 1 Gold Medal
2009-10	94	18 with 1 Gold Medal

### **5.1.9 Describe efforts made by the institutions to facilitate progression to employment.**

1. We arrange training programmes through leading companies like Infosys, Cognizant, WIPRO through which we update the students about the industrial expectations to increase the employable skills among the students.
2. Based on the above needs we conduct training programmes for the students in almost all the areas like communication, Aptitude skills and HR Interview skills regularly. We engage internal and external experts for training the students.
3. We invite regularly our ALUMNI for training the juniors to bring more awareness about the present scenario and for making them employable.
4. We have tie-ups and MoU with leading Industries for conducting campus interviews at our campus.
5. We collect the feedback on the students performance in the interviews for the continuous development.
6. Our students participate off-campus interviews with the industries. Students can directly attend interviews at company premises.
7. Personality Development Programmes are conducted by internal and external resource persons to improve their soft skills.
8. Training programmes for students aimed at developing foreign language skills such as German, French and Japanese languages which will help the students to get abroad assignments.
9. Placement directory has been created for contacting companies and inviting them for all the college functions and Graduation day, Annual day celebrations.



10. Corporate Relations office is being maintained to strengthen the relationships with Top, Medium and small size companies.

11. Assessment Tests are conducted periodically to review the performance of the students.

## **5.2 Student Support System**

### **5.2.1 Does the institution publish its updated prospectus and handbooks annually? How is the information content disseminated to students?**

Yes, the institution publishes its updated prospectus and calendar of events annually and issued to every student and staff. Also the same is uploaded in the college web portal.

### **5.2.2 Does the institution has a website? Give details on information available for students.**

Yes, the institution has a website. Its web address is [www.sonatech.ac.in](http://www.sonatech.ac.in).

The following information is available in the college website for students.

- Yearly calendar
- Programmes offered
- Admission policy, calendar and fees details
- Curriculum and Syllabi
- Regulations

- Academic and Infrastructure facilities
- Scholarship details
- Recruiters list
- Training Methodology
- Placement News and Details
- Placement Portal
- Alumni Portal
- Library details
- Internal Test marks
- Industry Coordinated Courses
- Non-formal Courses
- Research facilities
- Results and rank holders
- Information about Conferences, Workshops & Training Programmes.

**5.2.3 Does the institution provide financial aid to students? Specify the type and number of scholarships/ freeships given to the students last year? What types of insurance covers are available to students?**

Yes, the institution provides financial aid to students.

10% of the admitted BE and BTech degree students are getting Full Tuition Fee Waiver as per AICTE guidelines. All the first graduates in their family are getting Full Tuition Fee Waiver from Government of Tamilnadu. All the BC, MBC, SC, ST students are getting Government scholarships.

Apart from Government sources, the management sanction annually,

Rs. 5.0 lakh for merit-cum-means category

- Benefited 85 students last year

Rs. 5.0 lakh for sports category

- Benefited 104 students last year

Rs. 1.0 lakh for physically-challenged and wards of ex-service man

- Benefited 20 students last year

Rs. 0.5 lakh for NSS, NCC and YRC category

- Benefited 13 students last year

Rs. 2.0 lakh for students lost their parents category

- Benefited 9 students last year

Rs. 8.0 lakh for best performance in University Examinations

- Benefited 324 students last year

Group Insurance Scheme is implemented for all the students. The scheme cover accident benefit both to students and parents.

#### **5.2.4 What types of support services are available to overseas students?**

- Student's welfare on and off campus
- Guidance for Visa Processing, Eligibility Certificate and Equivalence Certificate
- Guidance in receiving the Government Scholarship
- Academic appraisal and communication with Parents
- Country wise cultural events for students

**5.2.5 What support services are available to SC/ST students and differently abled students.**

1. Identification of deficiencies of each student at the time of entry and providing additional input by way of extra classes and courses in soft-skill development.
2. Extra classes for students who do not pass examination in one attempt
3. Imparting skills in letter writing
4. Communication of progress of the students to their parents
5. Compiling past examination questions and making them available to the students
6. Compiling answers to frequently asked questions in the examination.
7. Assisting for obtaining scholarships from Government agencies under special schemes.
8. A book bank separately for SC/ST students in the Library is created.
9. All the buildings are provided with Ramps.
10. Toilet with special provision for differently abled students are created in all the buildings.

**5.2.6 Does the institution offer placement and counselling services to students? Is there special counselling for women students?**

We do counseling while admitting the students to make them more clarity in their selection of courses and about the available opportunities for the employment to the concern branch of study.

We conduct counseling for finding out the real need of training through proper assessment, based on the same we prioritize the training sessions to students.

We do conduct the special counseling for women students based on the need and requirement.

**5.2.7 Does the faculty participate in academic and personal counselling?  
How many have participated last year?**

Every Faculty is allotted a specified number of students (around 15 in number), and they will conduct academic and personal counseling for the students once in two weeks. Around 200 faculty have participated in academic and personal counseling, called 'Faculty Advisor'.

**5.2.8 Has the employment cell encouraged students to be self- employed during the last five years? What are its activities?**

We have a separate cell called "EDC cell" for developing the attitude of entrepreneurship in Campus through various seminars and interactions with successful entrepreneurs.

CII – Tamilnadu organized a business competition in which one of our student awarded Rs. 10,000/- as cash PRIZE and the title of the same is Plan on updating twitter status via local sms

IIT has conducted a seminar on MY IDEA for developing the entrepreneurship thinking among the students in IIT –Chennai in March 2010. Our students participated and contributed valuable ideas during the seminar.

Two Days entrepreneurship awareness camp has been conducted on 19th&20<sup>th</sup> of Jan 2010 at Sona College campus and around three hundred students participated in the programme.

SONA Association for the Future Entrepreneurs - a forum SAFE is activated and it is organizing regular programmes by successful entrepreneurs to motivate and to share their experience to the young engineering minds.

Every year this cell conducts the ISTE sponsored entrepreneurship awareness programme for two days.

**5.2.9 Does the institution have an alumni association? What are its activities?**

Alumni Association has been formed for each department separately and every year Alumni Day is being celebrated in the college.

Alumni chapters are also functioning from Chennai and Bangalore.

Alumni are in regular touch with Placement Executives when they are in town for meeting corporate professionals.

Alumni are being invited to visit the college for students interaction and training to develop the students to meet the industrial expectations.

They are helping their juniors whenever companies are announcing for conducting interviews through their employee reference.

**5.2.10 List the names of top 10 most renowned Alumni of the college along with their designation?**

<b>S.No</b>	<b>Name</b>	<b>Branch &amp; Batch</b>	<b>Current status</b>
1	Mr.P.L.Ashok Kumar	IT & 2002	Sr.System Design Engineer, Microsoft Corporation, USA
2	Mr.P.Pattabiraman	CSE & 2001	HR Manager, Scope International Ltd, Chennai
3	Mr.G.Senthil Balaji	ECE &2003	Completed his Ph.D in Mathematics from Clemson University and currently pursing his Ph.D in Optics from the University of California , USA
4	Mr.Kalimullah	ECE & 2006	Sr.Network Engineer in Dubai Telecom Ltd, Dubai
5	Mr.V. Karthikeyan	IT & 2007	Sr. Quality Engineer, Yahoo India, Bangalore
6	Mr.Valleeswaran	IT & 2004	Sr.Qualtiy Engineer, Flipkart Ltd, Bangalore
7	Mr.S.R.Sharfudeen	FT & 2004	Asst.Manager, Reliance Retail Business, Bangalore

<b>S.No</b>	<b>Name</b>	<b>Branch &amp; Batch</b>	<b>Current status</b>
8	Ms.E.Krithiga	EEE & 2008	Engineer, BHEL, Trichy
9	Mr.M.Mohammed Harex	CIVIL&2008	Executive(Power Plant), L&T, Andhra Pradesh
10	Mr.V.Obuli Raj	MECH&2006	SAP Consultant, Schneider Electric , Bangalore

**5.2.11 Are the alumni contributing to the development of the institution?**

**Specify how?**

Regular Meetings are conducted through Alumni Chapters in Chennai and Bangalore and the placement department gets lot of information about the industries expectation and updates.

Alumni are being used to get the information about their employers need for the fresher's recruitment and commencement period .

Alumni are visiting the college for encouraging the juniors at various occasions and celebrations and they contribute a lot for building confidence and providing guidelines for making the effective projects among the students.

**5.2.12 Does the institution have a grievance redressal cell? What are its functions?**

Yes, the institution have a grievance redressal cell.

The cell is headed by Dr.K.Karunakaran, Dean and totally 5 members from various sections are representing. Anti Ragging Committee also in coordinate with this cell for redressal against the grievances of students.



The functions of the grievance redressal cell are

1. Students with grievances like problems in relationship with other students/staff/parents, communal race issue, etc. can make representation to any of the member at any point of time.
2. Every Friday between 4 pm and 5 pm, the members should meet and discuss the action plan against the grievances filed by students (Venue : Dean Office, First Year Block).
3. The action taken on grievances should be forwarded for every 3 months to 'The Director, Centre for Student Affairs, Anna University of Technology Coimbatore' periodically with the approval of the Principal.

**5.2.13 List the Number of grievances redressed during the last 2 years.**

**Mechanical**

1. Usage of computer lab after working hours with internet connection has been provided.
2. A special coaching class has been arranged for weak students.
3. Utilization of department library was included in the time table slot.
4. Placement training classes has been arranged to improve the aptitude and verbal skills of the students.

**EEE**

1. Requirement of more class rooms for UG Students and the same has been provided.
2. To increase more number of text books / reference books in college and department library and the same provided.

3. To have more Internet connectivity in department computers and the same provided.

### **General**

1. ME degree students requested to speed-up their receipt of GATE scholarships from AICTE and the same has been taken taken-up and provided.
2. Students of I year Civil Engineering have requested for better classroom atmosphere and the same was fulfilled.
3. Foreign National students have requested to change the University Sports norms to enable them to participate in the University Sports and Games and the same has been initiated.

**5.2.14 Is there a provision for welfare schemes for students? If yes, give details? Yes, there are several welfare schemes available for students.**

Group insurance scheme is implemented for all students.

- Management provides scholarships to meritorious students, merit cum means basis, sports category, differently abled students, wards of defense personnel categories to a sum of Rs 60 lakhs per annum.
- Awards for 100% attendance, performers in Tests, Semester exams, University Rank holders and Best outgoing students.
- Students are encouraged to participate in extra- and co-curricular activities. Students are provided with TA and Registration for participation in National and International competitions.
- Concessional hostel facility for poor students.

- Grievances are addressed through Grievance cell.
- Student Welfare Officer, Class Counselors and Faculty Advisors take care of counseling of the students.
- Medical assistance is provided for free of cost.
- Placement and training opportunities are provided.

**5.2.15 Is there a cell to prevent Sexual Harassment? How effective is the cell?**

Yes, there is a cell called “Women’s Grievances Redress Cell” functioning in our college with the following officer bearers.

1. Dr. M. Usha (Chair Person)
2. Dr. M. Renuga (Secretary)

This cell conducts programmes for girl students to bring in awareness about gender abuses. The committee members meet at regular intervals. We are happy to say that so far no such case or issue has been found in our college.

**5.2.16 What are the efforts to provide legal literacy to women?**

There is a club called ‘Women’s Development Wing’ functioning successfully for the overall personality development of girl students in our college. The club was established in 1997.

The club has the following office bearers:

- Staff Co-ordinators
- Chair Person
- Secretary
- Joint Secretary and

- Organising Committee Members

The club conducts various awareness programmes and skill development programmes. For example, last year the club conducted a **forty eight days** programme for **Kungfu and Taichi**. The club also organises legal literary programmes by way of guest lectures by famous counsellors like Dr. Saraswathi Bhaskar, Dr. Arthi Rajarathnam, Police personal like Ms. Anusuya Ernest and eminent personalities like Saradha Nambi Arooran, Dr. Tara Thiagarajan and Smt. Lathika Pai. Such programmes are conducted every year under the auspices of Women's Development.

#### **5.2.17 What are the support services made available for differently abled Students?**

- Ramps with slope of 1 in 12 are provided at the entry of each building
- In each Toilet Block, near the entrance, one water closet with a bigger size is provided
- As far as possible, a classroom with a differently abled students is conducted in the ground floor
- Barrier free access is provided in all the floors of the buildings for easy access to the classrooms, laboratories, toilets, etc.
- National Building Code (NBC) and local authority/town planning guidelines are followed in providing the above facilities
- All the differently abled students are provided with full tuition fee waiver or partial tuition fee waiver in addition to Government Scholarships.

**5.2.18 What specific measures has the institution taken to enhance the quality of education with reference to student support and progression?**

The specific measures are

**Infrastructure**

- Bright and airy class rooms
- State-of-the-art laboratories
- Well-stacked library
- Medical facilities
- Hostel facilities
- 1:14 staff student ratio
- Education through EduSAT, IIT Bombay Live, multimedia, ..
- Spacious sports facilities with swimming pool, golf, gym, yoga, music, billiards, etc..

**Research & Development**

- 22 R&D centres and Centres of Excellence in specific areas for research, training and development

**Financial Support**

- scholarships to meritorious, merit cum means, sports and special category students
- recognizing students who have got 100% attendance.
- Cash awards to good performers in Tests, Model exams

- Cash awards to students who have got First three ranks in the University exams
- Cash awards to all University rank holders
- Cash awards to Subject-wise toppers
- Department-wise 'Best outgoing student' awards

#### **Others**

- Training towards placement
- Industry Tie-ups for Industry need training
- Guest lecturers from eminent scientists/scholars/professors
- Encouragement towards extra- and co-curricular activities.

#### **5.2.19 What are the health services available to students such as resident doctor, group health insurance scheme etc.**

Medical centre is functioning in the institution with 3 doctors including two lady doctors and a nurse maid. Services like consultation, first aid and medical check-up are being provided. The nearby hospitals namely Gokulam Multi-Specialty Hospital, Shanmuga Multi-Specialty Hospital and Pranav Multi-Specialty Hospital are affiliated for further treatment.

Further to medical assistance, Physiotherapy, Yoga treatment and Blood sugar testing are also provided to students and staff.

All the staff and students are provided with group health insurance with Bajaj Insurance Co Ltd.

**5.2.20 Describe the safety measures provided by the institutions like security and adequate lighting etc.**

Fire extinguishers are provided at the following places of the institution.

- Powerhouse
- Generator rooms
- Laboratories, Library and Workshops
- Office
- Residential areas in the hostels
- Hostels
- College cafeteria
- College buses

All staff and students trained in safety management every year through

- Lectures, Live Demonstrations - by District Fire Authorities
- All fire-extinguishers are serviced periodically.
- First aid kits kept at accident-prone places

Measures on Road Safety are

- Vehicular movement – controlled by Security Personnel
- Parking of vehicles – done in an orderly manner
- Road safety sign boards – kept at strategic places
- Barricades, Speed breakers used to direct and control traffic
- All staff and students are given Road safety awareness programme by the District Traffic Authority.
- The practice of rule of Helmet implemented

Other safety measures taken are

- Proper fencing for high tension electrical equipment
- Lightning arresters for electrical installations and building
- Proper overload and earth fault protections
- Rubber mats for all electrical distribution board
- Proper Earthing arrangements for electrical installations
- Use of ISS Certified materials for electrification
- Periodical testing of protective equipment
- Underground cable distribution throughout the College and Hostel campus
- Periodical Preventive maintenance works for electrical equipment
- Use of Rubber gloves for operation of switches
- Maintenance of First –aid box and fire fighting equipment
- Periodical training for operating staff
- Prohibited area - Sign Boards displayed
- Use of Helmets for Construction people
- Security officer and persons are deputed for the institution to monitor.
- Surveillance cameras are fixed at various places to monitor.

### **5.3 Student Activities**

#### **5.3.1 What are the various student cultural activities organized?**

Sona's '**Fine Arts Club**' was inaugurated in the year 1997. This club brings out the hidden talents of the students by conducting various cultural



events and music programmes. ‘**SONATA**’, a cultural fiesta celebrated by our Sona family every year is a time and chance to refresh our minds and revitalize our talents.

The club has the following office bearers

- Staff Coordinators
- Chair Person
- Secretary
- Joint Secretary and
- Organising Committee Members

A **Musical Programme** by Airtel Super Singers **Nikhil Mathew** and **Ajesh** conducted on the 10th of March, 2010 had a good appreciation from the students and staff.

### **5.3.2 Furnish information regarding the participation of students in extra curricular activities and co-curricular activities?**

Sona fine-tunes the personality of our students by promoting various Co-curricular and Extra-curricular activities.

Following are the units activated for enhancing the extra-curricular activities.

- NCC – National Cadet Corps
- NSS – National Service Scheme
- YRC – Youth Red Cross
- RRC – Red Ribbon Club

- EDC – Entrepreneurship Development Cell
- Fine Arts Association
- Sonaria Music Club
- International Student’s Club

These units organize programmes like seminars, conferences, firing camps, drill practices, personality development programmes and voluntary service activities.

Social service activities are also taken up like tsunami relief operations, eye camps, blood donation, vaccination camps, mass immigration, health awareness, AIDS eradication programme etc..

Following are the clubs functioning in Sona to motivate the students to participate in co-curricular activities and enhance their inherent talents.

- Women’s Development Wing
- Ripples
- Tamil Mandram
- Aptitude and IQ Club
- English Literary Club
- Science Club
- Tremors Club

Almost all the students become members of atleast one of these clubs and showcase their talents.

### **5.3.3 What are the incentives given to students who are proficient in sports?**

Good number of students with sports achievement are considered for admission under sports quota.

Anna University conducts zonal level and inter-zonal level tournaments to students. Students are actively participating in all events.

Total sum of Rs. 5.0 Lakh is allotted as scholarships for sports students, which include full tuition fee waiver, partial tuition fee waiver and free hostel accommodation.

Participation in open competitions are also encouraged both in national and international level.

10% attendance waiver is provided to sports students.

**5.3.4 Give details of the participation of students in sports and the outcome, at the state, regional, national and international levels, during the last five years?**

<b>Academic Year</b>	<b>University Zonal Level</b>	<b>University Position (State)</b>	<b>National Level</b>	<b>International Level</b>
2005-06	Overall Champion	I Place – 2 II Place – 6 Players -14	II Place – 1 event (Ball Badminton Women) Players -1	-
2007-08	Overall Champion	I Place – 1 II Place – 4 III Place –2 Players -11	Players -1	-
2008-09	Overall Champion	I Place – 2 II Place – 5 III Place -3 Players - 9	Players -2	-

<b>Academic Year</b>	<b>University Zonal Level</b>	<b>University Position (State)</b>	<b>National Level</b>	<b>International Level</b>
2009-10	Overall Champion	I Place – 4 II Place – 3 III Place 2 Players -12	II Place – 2 (Fencing, Volleyball) III Place – 2 (Power Lifting) Players -4	III Place – 1 (Power Lifting) held at Mongolia

**5.3.5 Does the institution collect feedback from students? Describe the mechanisms and using it for improvement?**

Yes, the institution is collecting feedback from students.

The feedback mechanism consists of:

- a. Collection of Data from departments requesting details of subject allocations for Faculty.
- b. Obtaining feedback from students in the standard format.
- c. Consolidation of feedback got from the students and grading of Faculty.
- d. Generating and issuing 'Letters of appreciation' for Faculty who have got 'A' and 'B' grades.
- e. Arranging for 'Team Teaching' and 'Counseling' for Faculty who have got 'C' grades.
- f. Arranging for 'Pedagogy' programmes' for Faculty who have got 'D' grades.
- g. Evaluating the effectiveness of corrective action taken on non-performing Faculty.

Class committee meetings are conducted atleast twice in a semester which gives direct feedback about the system of teaching-learning.

This mechanism would enhance the quality of teaching-learning process.

**5.3.6 Describe the steps taken for encouraging student participation in institutional activities.**

Students are the coordinators for the following associations / clubs

- Fine Arts Association
- Women's Development Wing
- Ripples
- Tamil Mandram
- Aptitude and IQ Club
- English Literary Club
- Sonaria Music Club
- Science Club
- International Student's Club
- Tremors Club
- Sports Club

Students performing well in extra and co curricular events are awarded as the best outgoing student of the year.

## **5.4 Best Practices**

### **5.4.1 Describe the Best practices of the college, in terms of student support / student progression related activities**

Students are the organizers and coordinators for the student related activities/clubs.

- Students are encouraged to involve in research projects.
- Students are encouraged to participate in national level and international level competitions/workshops/seminars.
- ‘Best Outgoing Student’ awards for a male and a female student from each department based on academic achievement and co-curricular & extra-curricular.
- University Rank holders are awarded with up to Rs 50,000 cash.
- 95% attendance holders will be Rs 500 cash for every semester in the name of ‘Appreciation Award’.
- Large amount of scholarships for needy students.
- Bank loans are organized in the college premises.
- Student evaluation of the staff members.
- Training methodology for the personality development and placement.
- Yoga and Counseling for the needy students.

## **Criterion VI : Governance and Leadership**

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

#### **6.1.1 Does the Institution have a mission statement and goals in tune with the Objectives of Higher Education?**

Yes. The Vision and Mission Statements of the Institution are as stated below

##### **Vision :**

To become an institute of great repute, in the fields of Science, Applied Science, Engineering, Technology and Management studies, by offering a full range of programmes of global standard, to foster research, and to transform the students into globally competent personalities.

##### **Mission :**

- To provide Graduate, Post-graduate, Doctoral and other value-added programmes beneficial for the students
- To provide state-of-the-art resources required to achieve excellence in teaching-learning, and supplementary processes
- To provide Faculty and Staff with the required qualification and competence and to provide opportunity to upgrade their knowledge and skills
- To motivate the students to pursue higher education, competitive exams, and other value added programmes for their holistic development

- To provide opportunity to the students to bring out their inherent talent
- To establish Centres of excellence in the emerging areas of research
- To have regular interaction with the Industries in the area of R & D, and offer consultancy and testing services
- To offer Continuing education, and Non-formal vocational education programmes which are beneficial to the society

**6.1.2 What are the leadership functions of the Head of the Institution? How is the leadership system established in the college?**

“Principal” is the Head of the Institution. He performs the following activities

- Plans for the development of the Institution
- Executes the objectives of the governing body
- Liaises with DOTE/AICTE/University/UGC, etc.
- Ensures infrastructure and other mandatory resource requirements
- Ensures Faculty and Staff recruitment and monitors HR activities
- Monitors academic activities
- Monitors co-curricular and extra curricular activities
- Ensures discipline in the college.
- Motivates Staff in realizing Objectives
- Ensures Budgetary allocation for the department activities
- Conducts periodic review meetings with HODs
- Ensure research activities among the students and staff
- Ensures other continuing education and other activities related to social activities



Major activities carried out by the departments shall be done with the approval of the Principal. All Approval letters should bear the signature of the concerned Head of the department, and the Principal. This way, the leadership system is established.

### **6.1.3 What measures are taken by the institution to translate quality to the functioning of its various administrative and academic units?**

To translate quality to the functioning of its various administrative and academic units “Quality Objectives” consistent with the quality policy are formulated in measurable terms in different functional areas at both the Institution-level and department-level.

The Heads of the Departments and sections-in-charges ensure that the objectives are achieved within the stipulated time interval. The status of attainment of Quality objectives are reviewed and if necessary revised during “Management Review Committee” (MRC) meetings conducted as part of “ISO - Quality Management System”(QMS) requirements.

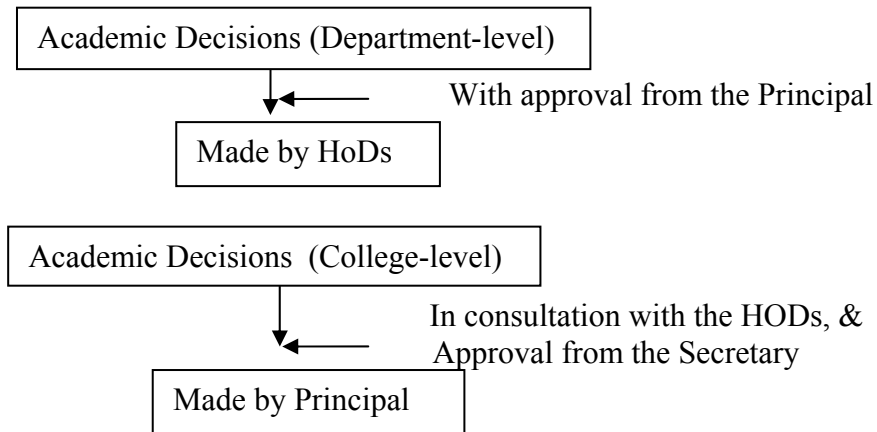
### **6.1.4 How are the faculty involved in decision-making?**

- Department level decisions are taken by the Heads of the Departments in consultation with the teaching faculty.
- Any major decisions pertaining to the departments are finalized by the Heads of the Departments with the approval of the Principal and the Secretary.
- HODs and Senior faculty are members of the various committees constituted for the effective functioning of the institution like advisory council, academic council, Board of Studies, Planning and Evaluation

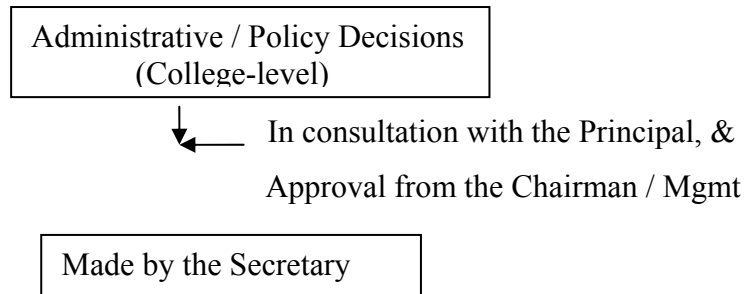
committee, etc., and their opinions are sought before any major policy decisions are finalized.

**6.1.5 Give a flowchart of academic and administrative decision making process.**

**ACADEMIC DECISION-MAKING PROCESS**



**ADMINISTRATIVE DECISION-MAKING PROCESS**



**6.1.6 Describe reforms in the management techniques employed and efforts to value employee's contribution.**

Every department acts as an autonomous unit, with the Heads of the Departments being delegated powers to take decisions related to their department. This makes them separate 'Strategic Business Units' (SBUs), and so ensures quick decision making and efficient functioning. The HODs

shall be solely responsible for the performance of the department in academic and other activities.

Employees are motivated for their contribution, as under:

- Giving increment for upgrading Qualification
- Giving financial support for Presenting / Publishing papers in National / International Conferences / Journals
- Giving incentive for Involving in R & D work and Patenting or Commercialization
- Giving incentive for involving in the Industry-Institute Interaction activities of the College and Department
- Giving cash awards for showing good performance in Academic results
- Giving cash awards for making special contributions to the Department / College

The increments and incentives are sanctioned by the Management under recommendations by the HODs, HRD and the Principal.

## **6.2 Organizational arrangements**

### **6.2.1 Give the organizational structure and details of the units of the statutory bodies?**

The Organizational structure is enclosed herewith.

The various Statutory bodies and their functions in brief, are as follows :

- **Governing body**  
(which formulates Policy regarding Academic and Administrative matters)
- **Academic Council**  
(which works out detailed activities regarding academic matters)

- **Board of Studies**  
(which decide the Curriculum and Syllabi)
- **Finance Committee**  
(which decide matters related to finance)
- **Examination Committee**  
(which decide matters related to the conduct of Exams)
- **Planning and Evaluation Committee**  
(which is responsible for Planning and evaluating the functioning of the depts.)
- **Grievance Appeal Committee**  
(which addresses the grievances of the students)
- **Admission Committee**  
(which decides on policies regarding student admissions)
- **Library Committee**  
(which decide on the functioning of Library)
- **Student Welfare Committee**  
(which addresses the Welfare activities of the students)
- **Extracurricular Activities Committee**  
(which decide on the Extracurricular activities)
- **Academic Audit Committee**  
(which plans for audit of the departments)
- **Research and Development Committee**  
(which plans and execute R & D activities)
- **Anti Ragging Committee**  
(which addresses issues related to ragging)

- **Sexual Harassment Committee**

(Which addresses issues of harassment of the weaker section)

**6.2.2 Give details of the meetings held and decisions made, regarding finance, infrastructure, faculty, academic research, extension, linkages and examinations held during the last year?**

Every year, we are conducting the meeting for Finance, Infrastructure, Research and Examination. The details of minutes of meeting are given below.

**Finance:**

In Finance committee, the Principal is Chairman, one member from Management, one member from Accounts department and a senior faculty from each department is organized.

The committee meeting is held on 10<sup>th</sup> March 2010 at 11.00am in main conference hall, to discuss the Budget for the year 2010-11, Grant from funding Agencies, Proposal submission for fees committee and Revision of Budget 2009-2010.

**Infrastructures:**

Planning and Evaluation committee is organized a meeting for infrastructure on 20<sup>th</sup> April 2010 at main conference Hall. In this meeting the Committee is decided to plan the infrastructure facilities for each department. The committee recommends the construction of new building and lab facilities for the forth coming year based on the requirement from each department. In this students also invited to give suggestions and grievances to improve the infrastructure facilities.

**Faculty:**

Faculty meeting is conducted twice in year with the Management, HOD's and faculty members at PG Auditorium, to discuss the facilities and pay revision. In this meeting the faculty may raise the questions, regarding their difficulties and requirements in handling the subjects.

**Academic Research, Extension:**

A committee is organized for research activities, in this committee the Principal is the chairman and all the HOD's are members.

This committee meeting is organized twice in a year, where to discuss the proposal submission for AICTE, DST, DIT, UGC etc... and requirement for conducting research activities and encourage the staff to attend national level seminars, papers to be published in reputed Journals, conducting sponsored seminars, workshops, SDP etc..The committee chairman requested all the HOD's to concentrate on research collaboration with industry, other colleges, universities and foreign universities.

**Examination:**

This committee consists of the Controller of Examination, a Deputy Controller of Examination and Section Officers to discuss the schedule for date of Examination, preparation of question papers, conducting the examination with external faculty members and result publication. This meeting is conducted twice in a year, last year we have conducted on 28.09.10.

### **6.2.3 How frequently are the meetings of the different statutory bodies held?**

**Describe coordination among bodies like BOS, AC, EC etc.**

Frequencies of the meetings are as follows:

- Governing body meeting : Once in a year.
- Academic Council meeting : Once in a year.
- Board of Studies meeting : Once in a year.
- Finance Committee meeting : Once in a year.
- Examination Committee meeting : Once in a year.
- Planning and Evaluation Committee meeting : Twice a year

The decisions taken at the Governing body meeting, is implemented in the Academic council and Finance committee.

The Decision taken at the Board of Studies meeting of each department, is approved by the Academic Council, and also intimated to the Examination Committee.

The Planning and evaluation committee ensures implementation of the decisions taken and objectives set.

### **6.2.4 What percentage of the management council's resolutions were implemented during the last year?**

Almost all the resolutions passed in the Management Council meeting, were implemented last year.

### **6.2.5 How is the administration decentralized?**

The decentralization of administration is as follows:

- “Secretary” is responsible for framing policies, creating infrastructure and administering and steering the organization towards growth.
- “Principal” looks after Academic and general administrative activities of the whole college.
- “HODs” take care of the functioning of their respective departments.

**6.2.6 Does the institution have an effective internal coordination and monitoring mechanism? Specify.**

The Institution has ‘ISO – Quality management system’ implemented, and ‘Quality Objectives’ are formulated in measurable terms which are consistent with the ‘Quality Policy’ of the institute, in almost all the functional areas and for major activities both in the academic and administrative areas. The status of achievement of the Objectives are monitored every semester, through ‘Internal Quality Audits’ conducted.

**6.2.7 How many times does the management and staff meet in an academic year?**

The Management and staff meet at least once in 2 months to discuss about academic and administrative issues.

**6.2.8 What are the informal/decentralized organizational arrangements made by the institution for effective governance?**

The various informal / decentralized organizational arrangements made by the institution for effective governance, are as under :



- Each HOD / Section head is empowered to take decisions regarding their department on their own (with intimation to the Principal if needed).
- Also, every HOD / Section head is empowered with financial independence - to spend up to a certain limit - for the department purpose.
- Principal is also empowered with financial independence – to sanction funds up to a certain limit.
- Any Faculty, Staff or Student can meet the Secretary regarding any special issue or grievance.
- Apart from all these, Suggestion boxes are kept in all departments for students to intimate their grievances without being identified.

### **6.3 Strategy development and deployment**

#### **6.3.1 Does the institution have a perspective plan for institutional development? How is it made?**

Yes, the Institution has a perspective plan for institutional development.

The following are the objectives of the perspective plan.

- Go in for more Post Graduate programmes
- Go in for additional intake in existing programmes
- To enhance Institutional Centres of Excellence, to carry out research, testing, consultancy, industry-linkages, continuing education, etc.
- To obtain Deemed University status.
- To have Collaboration / Tieup with Foreign Universities

The perspective plan is made by the Management and Secretary, in consultation with the Principal, HoDs and other Senior Faculty.

### **6.3.2 Describe strategic action plan and schedule for future development.**

#### **Future development :**

- Infrastructure development including a new Administrative block
- Obtaining Deemed University status in 2 years
- Collaboration with Foreign Universities
- Establishing Research centres and strengthening Research activities

### **6.3.3 Does the Institution have an academic calendar? How is it prepared?**

Yes the Institution has an academic calendar. The procedure for preparation of the calendar is as follows:

- Designating Faculty / Staff by the Principal for preparation of calendar
- Collecting the below mentioned inputs/schedule from HODs and other

#### Section heads :

- College events and activities
- Class committee meetings
- Test and Model exams
- Co-curricular activities
- Extra curricular activities
- Placement / Soft skills training
- Any other meetings
- Reviewing draft copy and approval of final draft

**6.3.4 During the last five years, specify how many plan proposals were initiated / implemented ?**

During the last five years, the following plan proposals have been initiated and implemented :

1. Increasing intake of students
2. Getting NBA accreditation for the programmes
3. Establishing Research Centres
4. Offering Value added courses through Continuing Education Centre
5. Offering courses through Sonaversity
6. Teacher evaluation and training
7. Students monitoring, motivation and welfare

**6.3.5 What are the initiatives taken by the institution to make optimum use of the autonomous status?**

The Institution has made optimum use of the autonomous status by taking the following steps :

- Revision of curriculum and syllabi by involving Industry experts
- Giving more importance to practical knowledge
- Timely announcements of results
- Timely conduct of supplementary examinations for reducing arrears and enhancing performance
- Offering more electives with industry collaboration

### **6.3.6 Has the college conducted an academic audit? Give details.**

Yes, the College is an I.S.O. certified institution, and has a Quality Management System in which “Internal Quality Audits” are conducted every semester. All the departments and programmes offered are audited by ‘Internal Quality Auditors’, using a Check-list, which covers all academic activities.

Apart from this, external audits by the University are organized by the college, twice a year.

### **6.3.7 Describe the institutional approach for decision-making and deployment**

Decision-making at the department level is done by the ‘Heads of the Department’ with the concurrence of the ‘Principal’ and the ‘Secretary’.

Decision-making at the college level is done by the ‘Chairman’ and the ‘Secretary’ with recommendations from the ‘Principal’, and if need be, in consultation with the HODs.

## **6.4 Human resource management**

### **6.4.1 How is the staff recruited? Illustrate the process of manpower planning?**

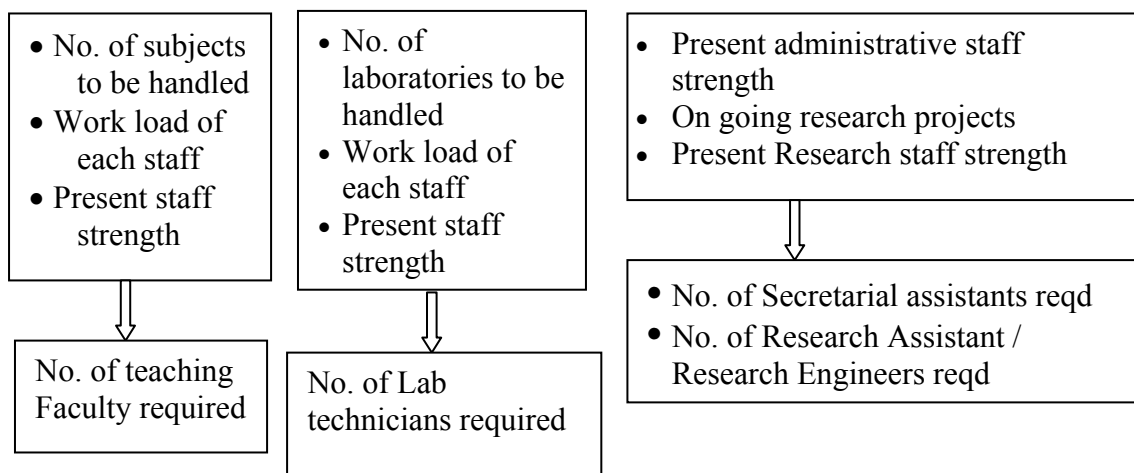
The recruitment process of the faculty members is as follows:

- a. Releasing advertisements in print media regarding vacancies
- b. Scrutinizing and short listing candidates.
- c. Conducting Interviews of candidates by a panel of members, consisting of senior staff members from the departments concerned, and if need be, outside external experts.
- d. Presenting the candidates to the Principal.

Based on the recommendation from the Principal & HODs, recruitment will be approved by the Secretary

### Manpower Planning

#### A. Teaching    B. Technical Staff    C. Administration & Research



**Total Manpower required = A + B + C**

#### 6.4.2 How do you assess the need for staff recruitment?

The need for staff recruitment is assessed based on the following criteria :

- No. of subjects to be handled for own and other departments
- Workload of each staff member
- AICTE Norms for workload and staff-student ratio
- Present staff strength
- Other requirements

#### 6.4.3 What percentages of faculty are recruited from other institutions?

Around 80% of our Faculty are graduates from other Institutions.

#### 6.4.4 What is the ratio of teaching to non-teaching staff ?

The ratio of Teaching to Non-teaching staff is “1:0.6”

**6.4.5 Describe the strategy to attract and retain talented faculty in aided/self financing courses?**

To retain talented faculty, Faculty are motivated by giving various awards, as stated below :

**Awards for :**

- Producing 100% and more than 95% results
- Producing University ranks (within top 50 ranks)
- Carrying out research activities
- Offering facilities to carry out research
- Publishing research papers in refereed national and international journals
- Getting grants and funds from funding agencies
- Special awards for exceptional service
- Service above 8 years in Sona
- Completion of 8 years in service at Sona

**6.4.6 Are the Government of India / State Government Policies on recruitment followed in terms of reservation and qualification norms?**

Qualification norms stipulated by the Government of India / State Government are followed on recruitment.

**6.4.7 Does the institution appraise the performance of the non-teaching staff? Specify.**

The institution appraises the performance of non-teaching staff through the following methods :

- Conducting exams for non-teaching staff
- Getting oral feedback from the HODs about their performance

**6.4.8 Does the institution have a ‘self-appraisal method’ to evaluate the performance of the faculty in teaching, research and extension programmes?**

Yes the institution have a self-appraisal method to evaluate the performance of the faculty in teaching, research and extension programmes.

**6.4.9 Are there any complaints, inquiries or legal suits pending against the functioning of the institution? Please give details.**

No. There are no complaints, inquiries or legal suits pending against the functioning of the institution.

**6.4.10 Has there been any study conducted during the last five years by the college / government or by any other external agencies on the functioning of any aspect of academic and administrative unit? Give the details and enclose the reports.**

The External agencies which have conducted a study on the functioning of the academic and administrative unit of the Institute is as mentioned below :

- Anna University, Coimbatore
- Bureau VERITAS Certification India

The reports of the last external audit conducted, are enclosed herewith.

**6.4.11 Has the institution conducted any programme for skill upgradation and training of the non-teaching staff based on the performance appraisal?**

Yes. The Institution has conducted programme for skill upgradation and training of the non-teaching staff.

**6.4.12 Does the institution conduct staff development programme for the teaching staff? Illustrate.**

The Institution regularly conducts 'Pedagogy' programme for the teaching staff, at least once in a year. The details of Pedagogy programmes conducted, and the number of participants attended is given below :

<b>S.No.</b>	<b>Particulars of Programme</b>	<b>Period</b>	<b>No. of Faculty attended</b>
1	Pedagogy	21-1-2008 to 25-1-2008	12
2	Pedagogy	6-5-2008 to 14-5-2008	17
3	Pedagogy	3-11-2008 to 8-11-2008	18
4	Pedagogy	10-11-2008 to 15-11-2008	17
5	Pedagogy	15-6-2009 to 20-6-2009	25
6	Pedagogy	11-10-2010 to 15-10-2010	24
7	WIPRO - Mission 10x Faculty empowerment workshop	7-9-2009 to 11-9-2009	18
8	WIPRO - Mission 10x Faculty empowerment workshop	8-2-2011 to 12-2-2011	18



**6.4.13 Has the faculty been introduced to the use of computers, Internet, audio-visual aids, computer aided packages etc.,?**

Yes. Every department has got computers with internet connectivity for exclusive use of faculty. It is ensured that every Faculty member is allotted a separate Computer. Periodic training is given by MIS Department for use of computers and internet.

Also, every department is equipped with “LCD” and “Overhead” Projectors, for use by Faculty. Faculty members regularly make use of it for making Presentations to the students during teaching.

**6.5 Finance Management and Resource Mobilization**

**6.5.1 Provide details of the budget for the last financial year.**

<b>S.No</b>	<b>Particulars</b>	<b>Amount (Rs in Lakhs)</b>
<b>A). Revenue</b>		
1	Fee Receipts from Students	2100.00
2	Consultancy, Testing and Con.Education etc.,	150.00
3	Grant from AICTE / DST / other Govt. Bodies (Under Research and Modrob Scheme)	50.00
4	Sale of Application, Bus fee, etc.,	12.00
5	Interest on Endowment and other Deposits	18.00
<b>Total(A)</b>		<b>2330.00</b>
<b>B) Expenditure</b>		
1	Staff Salary	1200.00
2	Maintenance, Electricity, Sports, Examinations, Student Amenities etc.,	260.00
3	Academic activities of departments, Laboratories etc.,	160.00

<b>S.No</b>	<b>Particulars</b>	<b>Amount (Rs in Lakhs)</b>
4	Contingency / Miscellaneous expenses	40.00
5	Management Scholarship to students	50.00
6	Library Books and Journals	50.00
7	Equipment, Research, Teaching Aids, Seminars etc., (Includes Computer Systems and Accessories etc for Rs.100 Lakhs)	300.00
8	Buildings	350.00
9	Furniture & Fittings	70.00
<b>Total(B)</b>		<b>2480.00</b>
<b>Deficit (A-B)</b>		<b>-150.00</b>

**6.5.2 Is the operating budget of the institution adequate to cover the day-to-day expenses?**

Yes, it is adequate to cover the day-to-day expenses.

**6.5.3 Is the maintenance budget of the institution adequate with reference to its assets?**

Yes, it is adequate the maintenance budget with reference to its assets.

**6.5.4 How the budget is optimally utilized?**

Every Year the finance committee plan the budget according to the maintenance, expenditure of the college, if necessary the management will contribute the requirement. This is the way the budget is optimally utilized.

**6.5.5 Does the institution have a mechanism for internal and external audit? How regularly it is done?**

Yes, the internal audit is done by the finance committee and the external audit is done by the reputed auditors.

**6.5.6 What are the current tuition and other fees?**

**PART I Account- A**

Tuition Fee (per annum) (for all branches of Government iAllotment)	Rs.40,000
Tuition Fee (per annum) ( for all branches of Management Quota)	Rs.62,500

**PART II Account – B (To be sent to University)**

University Fees (Approval & Sports) (One times during admission)	Rs. 1,200
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**Account-C (Towards expenditure to students)**

Students Insurance (per annum)	Rs. 100
Uniform (Blazer, Lab coat, T-Shirt Shirt +Pant +Tie, ID Card) (Optional, One time during admission)	Rs. 3,500
Books , Notebooks, Records, Course Material, Lab Manuals (Optional, per annum)	Rs. 6,000

**PART III Account – D (Refundable)**

Caution Deposit (Refundable, One time during admission)	Rs. 5,000
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### **6.5.7 How often is the fee revised?**

The fee revision is fixed by the Government of Tamil Nadu, no way the college is decide to fix the fees.

### **6.5.8 What is the quantum of resources mobilized through donations? (other than block grants)**

Not Applicable

### **6.5.9 Narrate the efforts taken by the college for resource mobilization by various means.**

It is already said that the finance committee will decide the financial budget for the year, if the resource is not adequate, the management and loan from bank will make arrangement for the resources.

## **6.6 Best Practices**

### **6.6.1. Describe best practices in Governance and Leadership adopted by the college in terms of institutional vision and leadership / organizational arrangements / strategies development / deployment human resource management / financial management and resource mobilization**

A focussed institutional vision and dynamic leadership is ensured through a management team which is wholeheartedly dedicated to furthering technical education by dint of their 50 years of experience in successfully governing a technical education institution (Thiagarajar Polytechnic College, Salem).

The **organisational arrangements** include a Principal and Heads of Departments (HODs) who unequivocally share the management's vision and assiduously implement the educational policies that have become institutionalised over the last decade or so. The salient feature of this arrangement is 'decentralisation', whereby the HODs are empowered to administer their departments with operational flexibility while ensuring the implementation of broad institutional goals and policies. For key areas like student admission, human resources (staff recruitment and training), student placement training and placement, academic-autonomy initiatives, etc special appointments like Dean (Admissions), HR Manager, Corporate Relationship and Placement Manager, Controller of Examinations, etc are made.

**Strategies development:** For routine functioning of the college, any strategies that are required are developed by the Principal, often in consultation with the Secretary of the college or in association with the HODs through formal meetings, and for key strategies like those on research, foreign collaborations, etc, one or more of the members of the management are also involved in the meetings concerned.

**Deployment of human resources and management:** An HR Manager with a team of HR executives ensures effective deployment of faculty and staff required for the various categories of human resources in the college in consultation with the HODs. This is a unique feature of the organisational arrangements in the college.

**Financial management and resource mobilisation:** A separate Accounts Section in the Principal's Office, headed by a Finance Manager and an accounts team maintain and manage all of the financial resources of the college. The funds are maintained under appropriate heads for hassle-free transactions. The main source of finance mobilisation is through the fees collected from the regular students admitted into the full-time programmes of the college. Other minor sources include funds and grants secured by faculty from governmental funding agencies for research-and-development projects, staff development, conferences, travel, etc. They also include funds generated by faculty through industrial testing, consultancy and training, continuing education, etc.

## **Criterion VII: Innovative Practices**

### **7.1 Internal Quality Assurance System**

#### **7.1.1. Has the institution adopted any mechanism/ process for internal quality checks?**

For Every semester internal audit is carried out by the Trained team of Internal Quality Auditors. Check list will be given. The internal auditors monitor whether all the activities are carried out as per ISO and NBA requirements.

#### **7.1.2. How does the institution ensure the quality of its academic programmes?**

Academic Schedule is given at the beginning of every semester to cover syllabus and conduct weekly Tests and Model Exam as per guidelines. Continuous assessment is done and retest will be conducted if need arises.

Students are motivated to participate in Extra-curricular / Co-curricular activities like seminar, workshop etc. Intensive coaching is given.

Students Progress in Internal test Marks and Attendance is sent to parents regularly. Value Added courses, Guest Lectures, Seminars, Symposiums, Workshops are arranged.

HODs/Principal will check the documents periodically.

**7.1.3. How does the institution ensure the quality of its administration?**

Various committees are planned. Board of Studies will decide syllabus and curriculum based on Industry needs. Department has been decentralized. HODs can decide about machines to be purchased for the department including laboratories

**7.1.4. What are the innovative courses introduced during the last five years?**

**How do you promote innovation in curriculum?**

University Syllabus is followed. Apart from the syllabus, value added courses are offered for the students in different functional areas. Corporate Executives are invited to deliver guest lectures. Technical skill development courses and Contemporary courses are offered by Continuing Education Centres.

Our faculty members are members in the board of studies. During board of studies meeting they give their suggestions in order to promote innovation in curriculum.

Pedagogy includes Team teaching, Case Method, Role Play, Power point presentation, Information Communication Technology (ICT), Video lectures, EDUSAT (IIT-Mumbai, NPTEL) etc.

**7.1.5. Describe the strategies evolved in promoting innovations in teaching, learning and evaluation?**

Every faculty identifies few topics in their subjects which are beyond the syllabus. Student centric learning initiatives.



Innovation in Teaching (Team Teaching), learning, valuation is followed. Continuous Assessment is done and Application Oriented questions are asked in the examination(both internal and external).

Revaluation of answer scripts and supplementary examination is available for the benefit of students.

Collaboration with Industry, Research Institutions, Foreign Universities etc to bring in diverse innovative ideas.

**7.1.6. Elucidate some of the innovations in research and extension? What initiatives have been taken by the institution to give a significant thrust to research and development in the programmes?**

33 Research Centres are available which were inaugurated by Dr. A.P.J. Abdul Kalam, Former President of India on 12 August 2009.

1. Centre for Micro Machining / Centre for Nano Materials(CMM/CNM)
2. Centre of Excellence in Robotics and Nonlinear Dynamics
3. Sona CAD/CAM Centre
4. SONA SPEED ( Sona Special Power Electronics and Electric Drives)
5. Sona Electric Power Engineering Research and Testing centre (SonaPERT)
6. SONA SIPRO - Signal and Image Processing Research Office
7. SONA PCT - Printed Circuit Board Design, Fabrication and Training centre
8. CVES - Centre for VLSI and Embedded SoC
9. SONA NET - Sona Network Computing Research Centre
10. SONA MINE - Centre for Data Mining & Database System Design

11. SONA WEB – Centre for Web Services and Development
12. SONA FOSS - Centre for Research and Development of Free Open Source Software
13. SONA Bean - Java Consultancy and Development Centre
14. SONAVERSITY - Research and Development center for Multimedia Educational Resources
15. Sona School of Multimedia Technology
16. SONA ERD - Centre for study of Earthquake Resistant Design
17. SONA CCT - Centre for Study on Concrete Technology
18. SONA Reach - Centre for Research in Textiles / Garments and Extension Activities
19. Centre for Business Transformation
20. Centre for Research and Publication in Business Management
21. DATA SECURITY - Centre for Data Security using Steg Bio Metric Systems
22. SONA FLAIR - Sona Foreign Language Instruction And Research Centre
23. SONASTARCH - Sona Science Centre for Testing and Applied Research
24. RAINFALL & SONA RADIO WAVE PROPAGATION, Centre for study on Rainfall and Radio Wave Propagation (CRRP)
25. Centre for Photonics and Nano-Technology (PAN)
26. SONATRAN - Centre for Training & Development
27. Sona Continuing Education Centre
28. Centre for Social Responsibility Initiatives
29. Centre Infosys Campus Connect Programme
30. Sona Journal Publication Centre

## **Authorized Training Centre**

31. CISCO Local Networking Academy
32. IBM Centre of Excellence and Sun Academic Initiative Programme
33. Linux Training Center and Oracle Training Centre

### **7.1.7. What innovative strategies have been adopted in governance?**

HODs are given academic freedom to run the departments with respect to Admission of students, recruitment of teaching and non-teaching staff members etc. Annual Meeting of faculty and staff is conducted by the top Management to ensure the student progress in academic and introducing new methods of teaching.

Governing council meets regularly . Intranet(Sona Times), exclusive HR Department and MIS Department are available. Periodic progress reports sent to parents .Faculty are given incentives for publishing journal articles, academic oriented foreign travel.

### **7.1.8. What mechanisms have been developed by the institution for quality assurance within the existing academic and administrative system?**

ISO – Internal audit and external audit systems are followed for the past 9 years and NBA is followed for the past 6 years.

### **7.1.9. What are the functions carried out by the above mechanisms in the quality enhancement of the institution?**

For enhancing the quality of the institutions

- Periodic monitoring is carried out and if any non-compliance found corrective action will be taken immediately
- Counselling is given to the students regularly.
- Parents' meeting is conducted and their wards performance will be discussed during the meeting. With this continuous process, higher pass percentage is achieved.

**7.1.10. What role is played by the students in assuring quality of education imparted by the institution?**

Class Committee meeting is conducted twice in a semester and Students and faculty members participate in the meeting and discuss about the teaching learning process and the learning outcomes . Students' suggestions will be considered and corrective action will be taken.

**7.1.11. What initiatives have been taken up by the institution to promote best practices in the institution? How does the institution ensure that the best practices have been internalized?**

Staff training needs are identified and training programmes are conducted. Every year/semester Pedagogy programmes will be organized in order to provide training for the new faculty members. Staff members are motivated to attend training programmes and implement innovative teaching practices to enhance knowledge. Faculty members are attending seminars, workshops , conferences organized by leading institutes like NITTTR, NITs, IITs, IIMs etc. Students are encouraged to participate in competitions.

**7.1.12. In which way has the institution added value to student's quality enhancement?**

Modern teaching methods are introduced in teaching-learning process. Students are motivated to participate in state/region/national/international level Competitions. Also they are encouraged to write competitive exams. They are involved in professional activities. Placement training involves like Group Discussion, Aptitude test, mock interview. Corporate experts/Entrepreneurs are invited as judges to evaluate the student's performance in seminars, project work etc.

**7.2 Inclusive Practices**

**7.2.1 What are the inclusive practices of the institution to impart holistic education?**

Students make an active participation in the following activities - Extra/Co-curricular activities, Student Centric learning initiatives, Yoga, Meditation, Blood Donor Clubs, NSS, NCC, YRC ,RRC, Sonaria Music Club, Drawing and Paining Club, Literary Club, Ripples Club.

**7.2.2 What are the specific initiatives adopted to establish social justice among students, faculty and community?**

Students are admitted under Sports Quota.

Women's development wing is created to create awareness in order to establish social justice among community.

Scholarship on various categories is announced for the benefits of the students. Ramp Wheel chair, exclusive toilets are available for differently abled persons.

**7.2.3 How does the institution promote social responsibilities and citizenship roles among the students?**

NSS, NCC, YRC, RRC, Blood donors club, Tremors club are created and students take an active participation in all these activities. Ethics subject is taught for B.E and MBA students.

**7.2.4 What are the institutional efforts to bring in ‘Community orientation’ in its activities?**

The objectives set by the institution with respect to community orientation are

- To offer short-term non-formal and vocational Programmes to impart specific skills to rural people in order to enhance their employability and quality of life.
- To organise various programmes to enhance the Ecological awareness among the public
- To support the economically backward class by providing Entrepreneurship development programmes.
- To provide Rehabilitation measures and support to differently abled persons
- To Develop Strategic Networking with Self Help Groups to improve their livelihood activities
- Sona Centre for Non-Formal and Vocational Education is providing training and continuous education to the needy.

The stakeholders of Sona's Social responsibility are rural community, Industry and service sectors, differently abled persons, self help groups, women, social welfare groups, R& D etc. Training programmes are offered in the areas of Engineering, Technology, Crafts and Fine Arts, Languages, Home Science, Agriculture, Entrepreneurship and Management. The strategic supports are provided for Corporate Social responsibilities, upgradation of Industrial training institutes and vocational stream programmes of rural school. Tailors and Masons have been trained.

**7.2.5 Does the institution have any exclusive program under extra-mural/enrichment wing, to promote social responsibilities and citizenship roles?**

**Youth Red Cross**

- Public awareness road rally, Bike rally for road safety and helmet awareness programme is conducted.
- Blood donation camps are organized.

**National Service Scheme**

Planting of Tree Saplings, Sanitation programme, AIDS Awareness Programme, Awareness on blood donation, Eye donation are being conducted. NCC camps are conducted periodically. Extramural studies are taken by the students from time to time.

**7.2.6 Has the institution done a gender audit and/or any gender related sensitizing courses for the staff/students? Give details.**

Women's development wing is formed. Talks on woman related issues are arranged to sensitize the women staff and students in the institution. TEDx function was conducted in the college.

**7.2.7 What practices have been taken up by the institution to provide access to students from the following sections of the society:**

- a) Socially-backward**
- b) Economically-weaker and**
- c) Differently-abled**

Scholarships in different categories are provided to the students. Tuition fee waiver and Free accommodation is provided for differently abled students. Ramp, wheel chairs, Exclusive toilets are available for differently abled students.

**7.2.8 What efforts have been made by the institution to recruit 1) Staff from the disadvantaged communities? Specify?**

- a) teaching**
- b) non-teaching**

During recruitment of teaching and non-teaching staff special consideration is given for women, differently abled persons, socially backward and economically weaker persons.



**7.2.9 What special efforts are made to achieve gender balance amongst students and staff?**

The admission and selection process ensures that the gender balance is maintained among students. Special consideration is given for women in employment.

**7.2.10 Has the institution done a gender audit and/or any gender-related sensitizing courses for the staff/ students? Give details.**

Please also refer answer to 7.2.6

- Self Defence courses for women (40 days programme)
- Awareness programme on legal issues conducted for women employees.

**7.2.11 What intervention strategies have been adopted by the institution to promote overall development of the students from rural/ tribal background?**

Student can meet faculty advisors regularly for counseling. Faculty advisors also take special interest in overall development of these students. Personality Development programmes, special programmes conducted for rural/tribal students.

**7.2.12 Does the institution have a mechanism to record the incremental academic growth of the students admitted from the disadvantaged sections?**

Faculty advisors are monitoring the incremental academic growth of the students from time to time. Faculty advisors are contacting the parents in person or through phone and inform their progress.

### **7.3 Stakeholder relationship**

#### **7.3.1. How does the institution involve all its stakeholders in planning, implementing and evaluating the academic programmes?**

Parents are invited to attend the Fresher's day function. Parents' meeting is organized regularly and whenever necessary student's performance is informed to their parents over phone and through letters. Student's feedback is taken for every semester in order to implement innovative teaching methods in the curriculum. During university examinations, University Representatives visit the institution to monitor and co-ordinate for the smooth conduct of examination. Academic members of the university and teachers are also involved.

#### **7.3.2. How does the institution develop new programmes to create an overall climate conducive to learning?**

New programmes are offered according to the needs and in collaboration with the industry experts.

#### **7.3.3. What are the key factors that attract students and stakeholders resulting in stakeholder satisfaction?**

Weekly Tests and model exams are conducted regularly. Weak students are identified and special coaching is provided. To score better marks in the examination students are motivated and awarded for achieving university ranks. An exclusive placement cell is set up which brings companies to the campus, provides Placement training and conducts recruitment in the campus and off-campus.

**7.3.4. How does the institution elicit the cooperation from all stakeholders to ensure overall development of the students considering the curricular and co-curricular activities, research, community orientation the personal/ spiritual development of the students?**

Faculty and students are encouraged to take up research work. Yoga programme is conducted for all employees and students. Leading personalities talk on various subjects to shape the personality of the students and other stakeholders. NSS, NCC, YRC, RRC is functioning for the welfare of the student and the community.

**7.3.5. How do you anticipate public concerns in your institutions with current and future programme offerings and operations?**

Public, parents, faculty and staff, students, recruiters are informed about the performance of current programmes, future programmes in college day / fresher day / teachers day function.

**7.3.6. How does the institution promote social responsibilities and citizenship roles among the students? Does it have any exclusive program for the same?**

NSS, NCC, YRC, Blood Donors Club, Women's Club, RRC is available to promote leadership qualities and to serve the society.

**7.3.7. What are the institutional efforts to bring in community-orientation in its activities?**

NSS, YRC, Blood Donors club serve the community from time to time. NSS, NCC camps are conducted periodically. YRC rally was organized.

**7.3.8. How does your institution actively support and strengthen the neighborhood communities? How do you identify community needs and determine areas of emphasis for organizational involvement and support?**

The college has identified the needs of communities and required training is provided. Eg. The women from villages have been trained in Tailoring and they got employment. Computer training / Mason Training given to the needy.

**7.3.9. How do the faculty and students contribute in these activities?**

Faculty and students are regularly visiting old age homes, involved in Tree plantation work and Blood donation, special NSS camps conducted in villages, Traffic control, cleaning of temples were conducted.

**7.3.10. Describe how your institution determines student satisfaction, relative to academic benchmarks? Do you update the approach in view of the current and future educational needs and challenges?**

Students feedback (written) about faculty, teaching methods play an important role. Students express their views in the class committee meetings for improvement.

Students suggestion are considered. Suggestion boxes are available in the college and hostel premises.

#### **7.3.11. How do you build relationships**

- to attract and retain students – Students are encouraged to participate in seminars, writing articles and special incentives is paid by the management for the winners. Arrangements are made to Interact with Industry experts.
- to enhance student's performance – Regular interaction with Faculty, Faculty Advisor and attending seminars.
- to meet their expectations of learning – Students feedback is considered.

#### **7.3.12. What is your complaint management process? How do you ensure that these complaints are resolved promptly and effectively? How are complaints aggregated and analyzed for use in the improvement of the organization, and for better stakeholder-relationship and satisfaction?**

Suggestion boxes are available in many places in the college / Hostel campus. All suggestions, complaints are recorded and suitable action is taken by the Student Welfare Officer in consultation with the Principal and Concerned Heads of Departments.

#### **7.3.13. How are the core values of NAAC reflected in the various functions of the institution?**

Academic freedom is appreciated by faculty and students. They are encouraged to publish papers, file patents, to do research, to participate in

seminars/workshops. Faculty members attend training programmes regularly. Contributing to National Development through research, consultancy and training Contributing to Research Collaboration with Industries for research and project work for students, factory visits and Guest Lectures. Collaboration with Overseas Universities for research.

Inculcating value system Professional Ethics subject is taught to students Yoga, Meditation centre is functioning Promoting the use of technologies through various research centres. Quest for excellence – Suggestions of all the Stake-holders are considered to improve the quality.

## C.Evaluative Report of the Department

### Department of Mechanical Engineering

#### 1. Faculty Profile, Adequacy & Competency of faculty

Faculty Details	Required	Available	Professor	Assistant Professor	Senior Lecturer	Lecturer	No. of Ph.D	Ph.D (Pursuing)
Teaching Faculty Programme	30	33	06	05	05	17	04	15

- Faculty strength is adequate as the teacher: student ratio is **1:14**

In Mechanical Engineering department we are having five Doctorates and almost all the faculty members are having Master degree and 50% of staffs are doing Research in various fields like Thermal, Robotics, Manufacturing, CAD, CAM, Engineering Design, I.E, I.C engines, etc., and they have rich experience in technical teaching and industrial exposure.

#### 2. Student Profile according to programmes of study, gender, region etc.,

U.G. B.E – MECH	Gender		Region			Total
	Male	Female	Tamil Nadu	Other State	Foreign	
I Year	143	-	128	01	14	143
II Year	152	01	152	-	01	153
III Year	144	01	143	01	01	145
IV Year	143	-	133	05	05	143

P.G. M.E – ED	Gender		Region			Total
	Male	Female	Tamil Nadu	Other State	Foreign	
I Year	15	-	15	-	-	15
II Year	16	2	18	-	-	18

P.G. M.E – PDD	Gender		Region			Total
	Male	Female	Tamil Nadu	Other State	Foreign	
I Year	16	-	16	-	-	16
II Year	17	-	17	-	-	17

**3. Changes made in the courses or Programmes during the past five years and the contribution of the faculty to those changes**

Year	Regulation	Remarks
2005-2006	2004 of AU-Chennai	No changes made
2006-2007	2004 of AU-Chennai	No changes made
2007-2008	2007 Regulations of AUT-CBE	List of new courses introduced in the 2007 Regulations of AUT-CBE and the corresponding courses of the R2004 AU-Chennai that were removed
University zone is changed and our college comes under Anna University of Technology, Coimbatore control form Anna University Chennai control in the academic year 2007-2008		
2008-2009	2008 Regulations of AUT-CBE	List of new courses that were introduced and the corresponding courses that were removed
Year	Regulation	Remarks
2009-2010	2008 Regulations of AUT-CBE	No changes made
2010-2011	Autonomous Curriculum	According to the latest trends and requirements of the industries new courses that were introduced and the corresponding courses that were removed

a. Dr.P.Govindarajan. Ph.D is a member for Board of studies in Mechanical Engineering, Anna University, Chennai.



- b. Dr.P.Govindarajan. Ph.D is a Convener for Board of studies in Mechanical Engineering, Anna University, Coimbatore.

**4. Trend in the success rate and dropout rate of students during the last five years**

Batch	No of Students	% Results	No of students dropped out
2002 – 2006	67	76%	-
2003 – 2007	73	83%	-
2004 – 2008	71	92%	-
2005 – 2009	132	92%	1
2006 – 2010	127	94%	8(Rejoining) 1(dropped)

**5.Learning resources of the department like library, computers, laboratories and other such resources**

	Item		Quantity
	<b>Library</b>	Total no of Books	
<b>Journals</b>		National	17
		International	12
Video Lectures		12	
Tutorial CDs		92	
<b>Computers</b>	Item		Quantity
	With Inter Net		132
	With Intranet		43
	Special purpose ( i.e., Integrated with Machine)		04
	Laptop		03
	Computers for Class work purpose ( for Presentation)		03
<b>Printer / Plotter</b>	Dot Matrix		03
	Laser ( B/W)		03
	Ink Jet		01
	Plotter Color		01
<b>Laboratories</b>	CAD/CAM lab		01
	IC Engine lab		01
	Heat and Mass transfer lab		01
	Fluid mechanics lab		01
	Metrology lab		01

<b>Laboratories</b>	Basic Workshop I	01
	Workshop- II	01
	Workshop- III	01
	Dynamics lab	01
	Mechatronics lab	01
	Simulation lab	01
<b>Miscellaneous</b>	Television	01

## 6. Enhancement of the learning resources during the past five years

- a. EDUSAT programs from Anna University Chennai for the problematic subjects like Finite Element Analysis, Design of transmission systems, kinematics of machines, Dynamics of machines etc., were arranged for the benefit of the students
- b. Purchased Course materials (Both Video and Web) from **National Programme on Technology Enhanced Learning (NPTEL)**"A Joint Venture by Indian Institutes of Technology And Indian Institute of Science, Bangalore" were purchased for the Latest , Research oriented and Result oriented subjects like thermodynamics, Fluid Mechanics, Robotics, Heat and Mass transfer, Machine Design, Manufacturing Process I and II , Mechanical Vibrations, Robotics, Advanced Strength of Materials etc.,
- c. Purchased Software like Solid works, Pro/E, ANSYS, LAB View, FluidSim software for laboratory.
- d. Addition of special equipment like Metallurgical Microscope with Image acquisition system, Pulse rectifier, Electroplating Setup, High energy Ball Mill, Micro Electro Chemical machining ( $\mu$  ECM) Setup, Sample Preparation Facilities.
- e. Addition of different titles in the referred international Journals like Science Direct, Elsevier etc., in the Digital Library.

- f. Addition of more volumes, text books, reference books, CDs, Journals and magazines in both college and department Library.
- g. Addition of more computers with internet facilities.

S.No	Item	2006-07	2007-08	2008-09	2009-10	2010-11
1	Total no of books	200	107	120	125	416
2	No of Journal	12	7	7	5	5
3	Total no of back volumes	45	37	40	15	4
4	CD's	20	22	18	32	-
5	Videos	3	2	3	2	2

### 7. Modern Teaching methods in practice other than the lecture method

- a. Arranged EDUSAT programs and video conference in co-ordination with Anna University Chennai.
- b. Arranged Video based guest lecture (From NPTEL – IIT)
- c. Arranged mock interviews for the final year students and it is conducted by industrial personals
- d. Used Power point shows and Animations ( CBT – Computer based Teaching) for the class works
- e. British English Council exams.
- f. Industrial Visit along with SAE professional Body to the leading industries and enhance the students skill by practically by providing the In-plant training for not less than 2 weeks.
- g. Attending Technical Fair (Technical Exhibition Conducted by Industries) to get more knowledge about the recent trends in the manufacturing sector.
- h. Organizing, Presenting and Participating International Conferences, Seminars and Technical events.

## 8. Participation of teachers in academic and personal counseling of students

- Periodical academic and non academic counseling for the entire department Students by Faculty advisors (1:15) and class Counselors.
- Arranging Parent Meeting for the entire department Students.
- Arranging Placement Oriented Programme for all the department Students.
- Arranging guest lecture and technical seminars for all department students to have more exposure and latest technological developments.

## 9. Details of faculty development programmes and teachers who benefited during the past five years

### Participation

Year	2005 – 06	2006 – 07	2007-08	2008 - 09	2009 - 10
No. of National conference attended	4	4	4	14	17
No. of International conference attended	3	5	1	8	20
No. of Workshops/ Seminar Attended	10	13	9	3	11
Invited Lectures	4	4	6	4	6
Training programme Attended	1	2	3	1	-
Pedagogy training attended	5	6	5	4	3
Faculty Develop programme	5	3	4	7	-
Staff Development Programme	1	2	3	1	-

### Publication

Year	2005 – 06	2006 – 07	2007-08	2008 -09	2009 -10
<b>Journals</b>					
<b>International</b>	1	6	6	6	17
<b>National</b>	2	1	1	2	1

Conference					
<b>International</b>	7	8	2	8	20
<b>National</b>	13	11	5	14	17

#### 10. Participation of teachers in academic activities other than teaching and research

CAD/CAM Course & Duration	2005-06	2006-07	2007-08	2008-09
	No. of students	No. of students	No. of students	No. of students
Solid Works & 3 Months	40	48	80	51
Auto CAD & 2 Months	9	9	56	6
CNC Lathe (Programming) & 2 Months	-	4	14	3

- Coordinating Professional bodies such as SAE Collegiate club, ISTE Student chapter.
- Participating Pedagogical Training, Faculty training, attending seminar, workshop and technical events.
- Delivering guest lecturers for other Technical Institutions.
- Giving Consultancy service to the industries like Vee Technology, JSW steel ltd, SAIL, etc.,.
- Arranging in-plant training in industrial and industrial visit for the benefit of the students.
- Staff members are representing national and International conference and symposium and acting as Juries / Judges and also various technical events.

#### 11. Collaborations with other departments and institutions at the national and International level and their outcome during the past five years

Details	Collaborative projects
CMNT	03
CAD/CAM Laboratory	04
MODROBs	01

Year	Consultancy given by	Job Details	Company
2005-2006	CAD/CAM	Fabrication of Spherical Pin, Spherical Pin	Jasan industries, Salem.
		Spherical Pin, Temperature stub, Adapter Pin, Temperature stub	Surenderan Engg. Works, Salem.
		Die and Punch	Charam Tech Private Ltd, Salem
		Spindle Pin	Jasan industries, Salem. Salem
2006-2007	CAD/CAM	Die and Punch	Salem Steel Plant, Salem
		Adapter Pin	Surenderan Engineering works, Salem
		Spindle Pin	Jasan Industries, salem
2007-2008	CAD/CAM	Spindle Pin	Jasan Industries, Salem
		Adapter Pin	Surenderan engineering Works, Salem.
		Slicing (Wirecut EDM)	Salem Steel Plant
2008-2009	CAD/CAM	Heat transfer analysis of cylinder (Model 1&2) -Failure analysis of Cylinder ( Model 2) -Buckling Analysis of Radial Flange -Buckling Analysis of Radial Flange (Case-II) -Heat Transfer analysis of Finned Model Analysis of Redesign Model -RPC Project	Vee Technologies Pvt. Ltd, Salem.302

**12.If research is a significant activity, what are the thrust areas of the department**

Heat Transfer & I.C. Engines

Robotics

Nano Technology & MEMS

Metal Forming

**13.Details of the ongoing projects and projects completed during the last five years**

	<b>Ongoing Projects</b>	<b>Project Completed</b>
CMNT	03	03
Robotics	05	-
IC Engine (MODROB)	-	01
CAD/CAM	02	15

<b>S.No</b>	<b>Principal Investigator</b>	<b>Title of the Project</b>	<b>Agencies/ Autonomous bodies</b>	<b>Amount received (Lakhs)</b>	<b>Status</b>
1.	Dr. P. Govindarajan	Computerized Variable Speed Diesel Engine Test rig under MODROB Scheme	AICTE	7	Completed
2.	Dr. R.M. Arunachalam	Studies on the Pulse Plating of Silver for the Jewelry Industry	AICTE	7.5	Completed
3.		Low cost Technique for Synthesis of Nano Structured Materials	DST	10.62	Completed
4.		Development and Performance Analysis of a Combined Micro EDM and Micro ECM setup	AICTE	10.5	Completed
5		Design and Development of 3 axis Multipurpose Machining setup	AICTE - RPS Scheme	17	Submitted and results awaited
6		Development of stir casting facility for synthesis of Nano particle reinforcement metal matrix composite	AICTE - RPS Scheme	5.76	
7		Design and Development of a Bottom Tapping Stir casting facility for Production of Nano Metal Matrix composite	DRDO	15.29	

S.No	Principal Investigator	Title of the Project	Agencies/ Autonomous bodies	Amount received (Lakhs)	Status
8	Dr.M.Thangavel	Mechanical design of Wheel Leg robot for space application	Vikram sarabhai space centre (VSSC) , Tiruvananthapuram	13.25	
9		Nonlinear dynamics of spacecraft during its journey through the atmosphere		22.17	
10		Bipedal Robot based experiment platform to study human walking inside space craft		29.88	
11		Design and Analysis of light weight 5-axis Robotic manipulator with indexing type End-effector		17.15	
12		Design, Fabrication and Control of light weight 5-axis Robotic, manipulator with Indexing type End-effector		India Space Research Organization (ISRO), Bangalore	

**14.Publications of the faculty, for the past five years. Details regarding citation index and impact factor.**

S. No	Name	National Conference	International Conference	Journals (National & International)	Citation	Impact Factor
		2005-10	2005-10	2005-10		
1.	Dr.R.Venkatesan	3	3	4		
2.	Dr.M.Thangavel	2	8	-		
3.	Dr. RM. Arunachalam	1	11	16		
4.	Prof. P. Suresh	2	-	-		
5.	Prof. A.Selvaraj	1	1	2		
6.	Dr.N.Elango	3	3	7		
7.	Dr.D.Senthil Kumar	3	3	4		
8.	Prof.R.Sasikumar	2	2	2		
9.	Prof.K.Rajkumar	3	3	-		
10.	Mr.A.Srinivasan	4	-	-		



S. No	Name	National Conference	International Conference	Journals (National & International)	Citation	Impact Factor
		2005-10	2005-10	2005-10		
11.	Mr.A.Jegan	1	1	1		
12.	Mr.V. M.Madhavan	1	-	-		
13.	Mr.K.Muralidharan	1	-	-		
14.	Mr.R.Mohan	6	2	-		
15.	Mr.A.Sivaprakasam	1	-	-		
16.	Mr.D. Suresh Babu	1	-	-		
17.	Mr.S.Lakshmanakumar	2	-	-		
18.	Mr.V.Kaviarasan	2	-	-		
19.	Mr.K.Shanmugavel	1	-	-		
20.	Mr.R.Ravikumar	2	-	-		
21.	Mr. M.Senthil Kumar	1	-	-		
22.	Mr.M.Pradeepkumar	1	-	-		
23.	Mr.A.R.Venkataramanan	1	-	-		
24.	Mr.M.Venkatesan	1	-	-		
25.	Mrs. Shanthi	2	-	-		

#### 15. Participation of the department in the extension activities of the college.

- Member in BOS in Anna university Chennai and Convener in BOS in Anna university Coimbatore
- Acting as a chief superintendent for conducting Anna University, Coimbatore examinations.
- SAE Collegiate club coordinator, ISTE student chapter coordinator
- Placement coordinator
- Anna university - Coimbatore Lead Auditors
- ISO internal auditor.

#### 16. Method of continuous student assessment

- Conducting regular weekly test on Monday and Wednesday for all subjects (3 cycle of test)

- b. Conducting model exam at end of the semester
- c. Regular contact with parents
- d. Periodical academic counseling of students by faculty advisors and class counselors.
- e. Guiding Student Projects and Mini Projects

**17. Placement record of the past students and the contribution of the department to the student placements**

<b>Batch</b>	<b>No of Students</b>	<b>No of Students Placed (ON, OFF Campus and after leaving Campus)</b>	<b>Higher Studies &amp; Entrepreneurship</b>
<b>2002 –06</b>	67	58	04
<b>2003 –07</b>	73	61	05
<b>2004 –08</b>	71	64	04
<b>2005 –09</b>	132	46	08

**18. Significant achievements of the department or faculty or students during the past five years**

**Dr.RM.Arunachalam**

- Awarded DST SERC FAST TRACK PROPOSAL FOR YOUNG SCIENTISTS for Rs.10.62 lakhs
- Awarded All India Council for Technical Education (AICTE) Career Award for Young Teachers (CAYT) for 10.50 lakhs

<b>Name of the Student</b>	<b>Name of the Publication</b>	<b>Name of the Magazine &amp; Editor</b>	<b>Name of the Publisher</b>	<b>Grants received from outside concerns</b>
S.Nirmalesh kumar	Design of an IC Engine with 12 Stroke Operation	Sonalisa. Dr.M.Renuga, Sona college of Technology	Sonaversity, Sona College of Technology	Rs.60,000/- From Tamil Nadu State Council and science Technology and TATA Funds

S.Nirmalesh kumar	Internal Combustion Engine	International Mechanical Engineering Congress And Exposition	ASME, Florida, USA	
	Internal Combustion Engine	International Conference On IC Engine	ASME, Switzerland	
	Greener Approach To Energy Production Through Photovoltaic	Short Term Project	University of New South Wales, Sydney, Australia	Rs.5,00,000/- From University of South Wales
	Photovoltaic optic fibre	(selected at NASA)		
S.Jeevamanikam	Synthesis And Characterisation Of Nano structured Stainless Steel 316l Through Machining	International Conference On Synthesis, Characterisation Consolidation And Modeling Of Nanomaterials	PSG College of Tech., Coimbatore	
P.R.Balaji	Carbon Fibre Reinforced Plastics	Souvenir	SNS College of Technology	
K.A.Deepak & N.Dhilip Kumar	Drowsy Driver Detection system	Szerszamune 08	Valliammai Engineering College, Chennai	

### Rank Holders

Year	B.E / M.E	Name	University	Rank Obtained
2007	M.E. (PDD)	Mr.B.M.Sankaranarayanan	Anna University	I
2005	M.E (Thermal)	Ms.J.Parveenbanu	Anna University	I
2005	M.E (Thermal)	Mr.C.T.Muthaiah	Anna University	III
2006	M.E (Thermal)	Mr.J.Chandran	Anna University	I
2007	M.E (CIM)	Mr.I.Balasubramanian	Anna University	I
2007	B.E(Mechanical)	Kamalraj	Anna University	XIV

2008	M.E ( Thermal )	Mr.S. Rajesh Kana	Anna University	I
2008	M.E. (ED)	Mr.R.Bharathidhasan	Anna University	III
2009	B.E(Mechanical)	Mr. S. Nandha Kumar	Anna University	XXV
2010	B.E(Mechanical)	Mr.Jeevemanickam	Anna University	XXXII

**19.Involvement of students in academic/co-curricular and other activities of the department.**

S.No	Year	Number of students participated in workshop/symposium		Number of students Published paper in Journal/Conference	
		UG	PG	UG	PG
1.	2005 - 06	4	2	-	35
2.	2006 - 07	7	2	-	45
3.	2007 - 08	5	16	-	25
4.	2008 - 09	1	17	1	3
5.	2009 - 10	75	22	1	22

<b>Awards/Prizes received by students in academic work &amp; activities (eg: First rank in University; National or State Award in specific academic activities)</b>	1.B.Gowthaman & R.Praveen Prasath got the I prize in kongu Engg. College for paper presentation
	A.Sathish & V.Sabesan got III prize in MANIT-Bhopal,GCT-Coimbatore
<b>Achievements in sports &amp; games by Students</b>	1.A.Saravankumar selected as a football university team representative
	2. C.Vasantharaja got III prize in Zonal level Ball Badminton
<b>Achievements in other extra-curricular activities by students</b>	1.BAJA 2010, SUPRA 2010, Patent applied for 12 stroke engine
	BAJA 2010,SUPRA 2010
<b>Awards/Honours/Patents/copyrights/Fellowships received by Faculty</b>	1.Patent filed for the invention entitled "Plate Cam cutting"

**20. Innovations and best practices initiated/adopted by the departments during the last five years.**

<b>Name of the Student</b>	<b>Name of the Publication</b>	<b>Name of the Magazine &amp; Editor</b>	<b>Name of the Publisher</b>
S.Nirmalesh kumar	Design of an IC Engine with 12 Stroke Operation	Sonalisa. Dr.M.Renuga, Sona college of Technology	Sonaversity, Sona College of Technology
	Internal Combustion Engine	International Mechanical Engineering Congress And Exposition	ASME, Florida, USA
	Internal Combustion Engine	International Conference On IC Engine	ASME, Switzerland
S.Nirmalesh kumar	Greener Approach To Energy Production Through Photovoltaic	Short Term Project	University of New South Wales, Sydney, Australia
	Patent applied for 12 stroke engine	Applied for Patent	
	Photovoltaic optic fibre	selected at NASA	
S.Naresh and team	SAE Baja 2011	Attended in Design Contest in IIT Delhi	
B.Logeshwaran and team	Supra SAE India 2011	In Process	

**21. Development and expansion plans of the department for the next 5 years**

Addition of New equipments such as Scanning electron microscope (SCM), tribological equipments, Transition Electron microscope (TEM) in the CMT Laboratory

Addition of recent for CMT Laboratory

Addition of New Robots such as 6 axis KUKA Robot in the Simulation laboratory

Addition of 500 tonne Press in the Special Machine Lab.

**22. Any other highlights**

- Department is accredited by NBA for UG Mechanical and PG PDD.

- Department is a recognized research center of Anna University, Chennai and Anna University, Coimbatore.
- Department has got research funds for 3 projects from autonomous bodies like from AICTE -2 & DST-1
- Department has got MoU with JSW Steel Limited, Pottaneri, Salem and Jasan Industries ,Salem
- Department staff has got young scientist award for the year 2008 from AICTE CAYT
- 31 students were placed in On Campus and 16 students were placed in Off campus and 11 students went for higher studies in 2003-2007,54 students were placed in On Campus and 1 students were placed in Off campus and 4 students went for higher studies 2004-2008 and 45 students were placed in On Campus and 35 students were placed in Off campus and 8 students went for higher studies in 2005-2009
- A student of current final year visited university of new south Wales, Sydney for short term project on “Greener Approach to Energy production through photovoltaic”.
- A student of current final year visited Switzerland for participating in International conference on IC Engines.
- A student of current final year visited Florida for participating in International Mechanical Engineering congress and Exposition.

## C.Evaluative Report of the Department

### Department of Electrical & Electronics Engineering

The self-evaluation of every department/subunit may be provided in about **three pages**, avoiding the repetition of data already given in the profile, to the extent possible. While the profile may provide quantitative data, this part of the report may be made more evaluative, using the quantitative data only to substantiate the claims, wherever necessary.

#### **1. Faculty profile, adequacy and competency of faculty**

- 33 EEE Faculties : Professors – 05; Assistant Professors – 05;  
Senior Lecturers – 08; Lecturers – 15
- Faculty qualifications: PhD – 04; PhD (Pursuing)-16; Masters Degree– 13.
- Faculty strength is adequate as the teacher: student ratio is 1:13
- The faculties are competent teachers, trained formally in pedagogy, and consistently produce 100% or nearly 100% results in the courses they teach.

#### **2. Student profile according to programmes of study, gender, region etc**

U.G B.E - EEE	Gender		Region			Total
	Boys	Girls	Tamil Nadu	Other State	Foreign	
<b>I Year</b>	77	60	124	01	12	137
<b>II Year</b>	77	70	141	02	04	147
<b>III Year</b>	67	81	142	01	05	148
<b>IV Year</b>	63	72	129	02	04	135

P.G M.E - PSE	Gender		Region			Total
	Boys	Girls	Tamil Nadu	Other State	Foreign	
<b>I Year</b>	11	07	15	03	--	18
<b>II Year</b>	09	09	18	--	--	18

P.G M.E - PED	Gender		Region			Total
	Boys	Girls	Tamil Nadu	Other State	Foreign	
<b>I Year</b>	08	10	18	--	--	18
<b>II Year</b>	09	09	18	--	--	18

**3. Changes made in the courses or programmes during the past five years and the contribution of the faculty to those changes**

**2005 - 2006 :** Regulations 2004 of AU-Chennai – No changes made

**2006 - 2007 :** Regulations 2004 of AU-Chennai – No changes made

**2007 - 2008 :** List of new courses introduced in the 2007 Regulations of

AUT- CBE and the corresponding courses of the R2004

AU - Chennai that were removed

**2008 - 2009 :** List of new courses that were introduced and the

corresponding courses that were removed

**2010 (Autonomous Curriculum):** Will be given by Dr. Karunakaran in the First year evaluation report.



**4. Trend in the success rate and drop out rate of students during the last five years**

<b>Batch</b>	<b>No of Students</b>	<b>Success Rate</b>	<b>Drop out Rate</b>
2002 – 2006	64	82.81 %	17.19 %
2003 – 2007	67	80.30 %	19.70 %
2004 – 2008	67	89.55 %	10.45 %
2005 – 2009	132	97.70 %	02.30 %
2006 – 2010	132	92.42 %	07.58 %

**5. Learning resources of the department like library, computers, laboratories and other such resources**

<b>Department Library</b>	<b>Quantity</b>
Total No of Books	1191
No of Titles	422
Journals	25
Tutorial CDs	27
Total No. of Computer's in EEE Dept.	132
Internet Connection	52
Printer Dot Matrix	08
Printer Laser (B/w)	03
Printer Laser Colour	02
VHP	02
OHP	03

<b>S.No</b>	<b>Department Lab</b>	<b>Area</b>
1	AC Machines Lab	366.96 Sq.m
2	Electrical Drives Lab	
3	DC Machines Lab	246.53 Sq.m
4	Simulation Lab - UG	141.75 Sq.m

S.No	Department Lab	Area
5	Simulation Lab - PG	
6	Power Electronics Lab - UG	186.825 Sq.m.
7	Power Electronics Lab - PG	
8	Digital IC Lab	133.88 Sq.m.
9	Microprocessor and Microcontroller Lab	
10	Measurements and Instrumentation Lab	119.04 Sq.m.
11	<b>SONASPEED</b> R&D Lab and Project Lab (UG and PG)	204.3 Sq.m.
12	<b>SONAPERT</b> R&D Lab and Project Lab (UG and PG)	130 Sq.m.

#### 6. Enhancement of the learning resources during the past five years

S. No	Item	2006-2007	2007-2008	2008-2009	2009-2010	2010 - 2011
1	Total no of Books	150	720	815	958	1191
2	No of Journals	--	--	10	15	25
3	Total No of Computers	48	68	85	112	132
4	No of Internet Connections	08	22	32	40	48
5	Purchase of Additional Laboratory Equipment (In Lakhs )	1.84	10.35	28.94	4.98	7.38

## 7. Modern Teaching methods in practice other than the lecture method

- Organizing Technical Lectures from Resource Persons (from ISRO, IISc, VSSC) to enhance the Technical skills of the EEE Students under [INAE- DVP] – Distinguished Visiting Professor Scheme.
- Professional and Technical Associations [EDISON, IEEE, ISTE].
- EDUSAT, Computer Based Teaching, Seminars, GDs, In plant Training, Industrial Visit, Projects etc.

## 8. Participation of teachers in academic and personal counseling of students

- Periodical academic and non academic counseling for all the department Students by Faculty advisors and class Counselors.
- Arranging Placement Oriented Programme for all the department Students
- Arranging guest lecture and technical seminars for all department students to have more exposure on latest technological developments.

## 9. Details of faculty development programmes and teachers who benefited during the past five years

Year	2005 - 06	2006 - 07	2007- 08	2008 - 09	2009 - 10
No. of National conference attended	15	29	07	03	05
No. of International conference attended	--	03	02	02	09

<b>Year</b>	<b>2005 - 06</b>	<b>2006 - 07</b>	<b>2007- 08</b>	<b>2008 - 09</b>	<b>2009 - 10</b>
<b>Programmes</b>					
No. of Workshops/ Seminar Attended	06	03	03	15	02
No. of Papers published in Journals	--	03	-	02	06
Invited Lectures	04	04	06	04	06
Pedagogy Training Program	04	03	04	03	04

**10. Participation of teachers in academic activities other than teaching and research**

- Involved as Class Counsellors (to regularly liaise with and keep day-to-day records of a designated class of students) and as Faculty Advisors (for counselling of an assigned group of students)
- Compiling / authoring course material for most of the theory courses assigned and developing lab manuals for the lab courses assigned
- Organising industrial visits for students and accompanying them during visits
- Organising conferences, seminars, guest lectures, student symposia, SDPs, student internships, etc
- Involved as Coordinator/Joint Coordinator for departmental Learning Resources Centre (Library)

- As resource persons for department's continuing education courses
- As Coordinators for placement training and organising on-site or off-site interviews for student placement
- Visiting industry periodically to enhance industry-academia interaction
- As guest lecturers/resource persons invited by other colleges
- As trainers for faculty or student development (department and college level)
- Staff members are representing national and International conference and symposium and acting as Juries / Judges in various technical events.

**11. Collaborations with other departments and institutions at the national and international level and their outcome during the past five years**

Sona SPEED R&D

<b>S.No</b>	<b>Project Title</b>	<b>Budgeted Project Cost (Rupees in Lakhs)</b>	<b>Status (Completed/ In progress)</b>
1	Development of Aerospace Demo Models	15	Completed
2	Design and Development of BLDC Torque motor	10	Completed
3	Design of Slotless BLDC motor	1.9	Completed
4	Development of Electronics of BLDC motor	1.96	Completed

<b>S.No</b>	<b>Project Title</b>	<b>Budgeted Project Cost (Rupees in Lakhs)</b>	<b>Status (Completed/ In progress)</b>
5	Realisation of Flight Model of Slotless BLDC motor	6	Completed
6	Development of BLDC lab motor	1	Completed
7	Design and Realisation of qualification models of Limited Angle Torque motor	17	Completed
8	Refurbishment of High KW BLDC motor	2.15	Completed
9	Realisation of Flight model of BLDC Torque motor	29	Ongoing
10	Development of 22.5 deg PM Stepper motor	16.5	Ongoing
11	Development of Control Moment Gyro	3	Ongoing
12	Development of Reaction wheel, Scan Mirror and super precision gyroscope Models	3.3	Ongoing

**SonaPERT R & D**

<b>S. No</b>	<b>Project Title</b>	<b>Budgeted Project Cost (Rupees in Lakhs)</b>	<b>Status (Completed/ In progress)</b>
1	Development of High Performance Condition Monitoring System for Power Transmission Line	8.23	Completed
2	Development of nano-composite materials for outdoor insulation applications	10.5	On-going
3	Solar Cell Battery System with Microcontroller Based Maximum Power Tracking For Domestic and Street Lighting In Rural Areas	0.01	Completed
4	Outdoor Polymeric Insulator Pollution Assessment Based on Partial Discharge Analysis	15 (PD Check Instrument)	Completed
5	Development of bio-degradable oil as alternate for petroleum based mineral oil for electrical applications.	0.50	On-going
6	Current Transformer Accuracy Testing System	2.25	Completed

<b>S. No</b>	<b>Project Title</b>	<b>Budgeted Project Cost(Rupees in Lakhs)</b>	<b>Status (Completed/ In progress)</b>
7	Potential Transformer Accuracy Testing System	2.25	On-going
8	Development of Regulated DC Power Supply	11	On-going

**12. If research is a significant activity, what are the thrust areas of the department**

Special Electrical machines & Controls and High voltage.

**13. Details of the ongoing projects and projects completed during the last five years**

Details are given in Item no 11.

**14. Publications of the faculty, for the past five years. Details regarding citation index and impact factor.**

<b>S. No.</b>	<b>Name of the Faculty</b>	<b>No of Publications</b>	<b>Paper Published</b>	<b>citation index</b>	<b>Impact factor</b>
1	Dr. S. Chandrasekar	45	IEEE/	Dr.S.Chandrasekar	1.2
2	Prof. C. Easwarlal	02	ISTE/	--	--
3	Prof. M. Senthil Kumar	01	International	--	--
4	Ms. R. Arulmozhiyal	01	Conference	--	1.33
5	Prof. S. Padma	02	and Journals	--	--
6	Prof. R. Shiva Kumar	02		--	--



**15. Participation of the department in the extension activities of the college.**

For the New Buildings – Calculation of Electrical load and execution of electrical connections.

**16. Method of continuous student assessment**

- One-hour test per course on Mondays and Wednesdays; Papers evaluated by Friday; Retest for absentees and below-par students on Saturday afternoons; Weekly test in Maths courses – every Friday, one hour
- Three weekly tests per course per semester
- University pattern model examinations for all theory and lab courses
- Assignments and Motivated Study Projects, at least two per course per semester
- Internal marks: 50% marks; Anna University exams: 50% marks
- Under autonomous system (2010 onwards) internal: external marks  
25: 75

Periodical academic counseling of students by faculty advisors and class counselors.

**17. Placement record of the past students and the contribution of the department to the student placements**

- The Electrical and Electronics Engineering department organizes all of its placement activities independently of the college placement cell.
- A pre-scheduled placement training plan is implemented at the departmental level every year.
- The department invites industry experts and alumni to train students for placement.

<b>Batch</b>	<b>No.Of Students</b>	<b>Placed Through On/Off Campus</b>	<b>Got Job After Leaving Campus</b>	<b>Higher Studies</b>	<b>Enterpreneurs</b>
2008	67	33	20	07	07
2009	132	28	68	17	19
2010	132	55	42	10	08

**18. Significant achievements of the department or faculty or students during the past five years**

- Dr.S.Chandraseker , Professor of Electrical and Electronics Engineering Department Receiving Young Scientist Award given by AICTE

- Dr.N.Kannan and Team Received appreciation letter based on the performance of the Proto model from Shri .Ramakrishnan, Director (Projects) on 7<sup>th</sup> February 2008 at VSSC Director's Conference Hall.
- Most of the faculty members Received award for 95% and above result produced in the university Examinations given by the Management.

### University Ranks

S.No	Name	University Rank	University
<b>2002 – 2005 Batch</b>			Anna University, Chennai
1	A. Sathya Priya	17	
2	R. Jothi Priya	45	
<b>2003 – 2007 Batch</b>			
3	Ummidi Sai Pallavi	17	
<b>2004 - 2008 Batch</b>			
4	E. Krithiga	1 (GOLD)	
5	S. Mowli	10	
<b>2005 – 2009 Batch</b>			
6	M. Preethi	16	
7	P. A. Sharanya Rani	43	
<b>2006 - 2010 Batch</b>			
8	M. Kalpana	11	
9	H. Haseenabanu	49	
10	R. Saranya	50	

## Sports

Batch	Student Name	Events	Achievements
2002 - 2006	V. Arjun Krishnan	Shuttle	State level Winner
2003 - 2007	Sahul Hameed	Cricket (Team Member)	State level Winner
2004 - 2008	Sethupathy	Basket Ball (Team Member)	State level Winner
	Senthil Kumar	Cricket (Team Member)	State level Winner
2005 - 2009	A. S.Saravanan	Football (Team Member)	State level Winner
	R. Magesh	Hand Ball	Regional level Runner
	S. Kalaiarasan	Cricket (Team Member)	Regional level Runner
	Vinoth Kumar	Power Lifter	State level Winner
2006 - 2010	M. Tamil Selvam	Basket Ball & Hand ball (Team Member)	Regional level Runner
	Preethi	Power Lifting & Cricket (Team Member)	Regional level Runner
	Ravivarman	Handball (Team Member)	Regional level Runner
	N. A. Dhivya	Ball Batmiton (Team Member)	Regional level Runner

### 19. Involvement of students in academic/co-curricular and other activities of the department.

S.No	Student Name	Gate Score	Year
1	S. Navaneetha Krishnan	74	(GATE-2009)
2	V. Vasantha Kannan	96.56	(GATE-2009)
3	S. Kalai Selvan	72	(GATE-2009)
4	V. Vasantha Kannan	96.23	(GATE-2010)

<b>Year</b>	<b>Paper Presentation</b>	<b>Projects</b>	<b>Multimedia Presentation</b>
2007 – 2008	103	12	11
2008 – 2009	92	15	12
2009 - 2010	106	23	19

**20. Innovations and best practices initiated/adopted by the departments during the last five years.**

- Strategic planning and implementation
  - Credit Point System for student soft skills development
  - Exclusive Book for Faculty Advisor Counseling Record
  - Arrears Clearance Plans
  - Institution and Practice of Quality Codes (each staff has a QC booklet)
  - Periodic motivational handouts for staff and students
  - Two-week and two-month student feedback on teaching-learning process
  - Regular workshops for student soft-skills development
  - Identification of student and faculty learning styles
  - Self-evaluation of faculty using a special format
  - Departmental motivational awards for commendable student academic performance and best outgoing students
  - Environmental-friendly principles in practice in the department
- University specifies innovations as a part of exercise to students. Hence studies of new / additional topics are given as innovations.

**21. Development and expansion plans of the department for the next 5 years**

To procure working models / do to understand basic working principles.

To introduce emerging fields as a branch of study.

**22. Any other highlights**

- The department is recognised as a research centre for PhD by Anna University of Technology - Coimbatore.
- In our department two R& D centres

1) **Sona SPEED**    2) **SonaPERT**

**Sona SPEED**

The research and development activities of **Sona SPEED**, Dept. of EEE during the year 2004-2010

**Slotless BLDC Motor for Meghatropiques Space Mechanism: IISU (17.4 Lakhs)**

- Feasibility study and design document
- Development of Engineering Model Motor-2Nos
- Development of Drive Electronics-1No
- Realization of Flight Model Motors- 3Nos

**Status: Completed (2007-2009)**

### **C25 Quadruplex BLDC torque motor for GSLV MK- III: VSSC (39 Lakhs)**

- Feasibility and design document
  - Development of proto model
  - Development of qualification model- 2nos
  - Realization of Flight Models- 10Nos (**Ongoing**)
- } Completed (2007-2010)

### **Limited Angle Torque Motor for CMG: IISU (14 Lakhs)**

- Feasibility study and design document
- Development of proto model and testing
- Development of qualification models, 2Nos

**Status: Completed (2008-2009)**

### **22.5 deg permanent magnet stepper motor: VSSC (16.5 Lakhs)**

- Feasibility study and design document
- Development of two proto models
- Development of two qualification models
- Development of ten flight models

**Status: Ongoing (2009-)**

### **Development of BLDC motor Lab setup: SCT/EEE(1 Lakh)**

**Status: Completed (2008)**

**7.5 KW BLDC Motor refurbishment: NIOT (2.15 Lakhs)**

- Refurbishment of BLDC armature stator and testing
- Refurbishment of BLDC motor with test setup

**Status: Completed (2008-2009)**

**High Power BLDC motor for RLV-TD project :VSSC(53Lakhs)**

- Design document
- Development of one Proto and Three Qualification model

**Status: Ongoing (2010-2011)**

**Development of Aerospace demo models for space museums:**

**IISU(21.32Lakhs)**

- MoU-1 with IISU(2004-2006)
  - MoU-2 with IISU(2006-2008)
  - Purchase order from IISU(2010-2011)
  - Purchase order from ISRO(SHAR)-(2010-2011)
- } Completed
- } Ongoing

**1 KW BLDC generator: iiTsa (0.8Lakhs)**

- Feasibility study, design and development, 2Nos

**Status: Completed (2010)**



## SonaPERT

S.No	Research and Development activity
1	Development of High Performance Condition Monitoring System for Power Transmission Line  – <b>AICTE –RPS – 8.23 Lakhs</b>
2	Development of Nano-Composite materials for Outdoor Insulation applications – <b>AICTE – CAYT – 10.5 Lakhs</b>
3	Outdoor Polymeric Insulator Pollution Assessment Based on Partial Discharge Analysis - <b>University of Bologna, Italy</b>
4	Development of Current Transformer Accuracy Testing System - <b>Megawin Switchgear, Salem. – 2.34 Lakhs</b>
5	Development of Potential Transformer Accuracy Testing System - <b>Megawin Switchgear, Salem. – 2.34 Lakhs</b>
6	Modernization of high Voltage Laboratory  – <b>AICTE MODROBS – 15 Lakhs</b>
7	Development of Regulated DC Power Supply – <b>National Institute of Ocean Technology – Chennai – 11.6 Lakhs</b>
8	Solar Cell Battery System with Microcontroller Based  Maximum Power Tracking For Domestic and Street Lighting  In Rural Areas – <b>L- RAMP – 0.1 Lakhs</b>

<b>S.No</b>	<b>Training</b>
1	Advanced PC based testing of Power Equipments
2	Recent condition monitoring techniques of power apparatus & systems
3	A Software Course on LabVIEW Programming

<b>S.No</b>	<b>Consultancy</b>
1	Power frequency with stand test for power equipments
2	Temperature Rise test for Switchgear & Control gear panels, Circuit breakers, Distribution Transformers, etc
3	Comparative Tracking Index test for insulating materials
4	Calibration of Electromechanical and Numerical Relays
5	Transformer oil Breakdown voltage testing
6	Underground Cable Fault testing

## C.Evaluative Report of the Department

### Department of Electronics and Communication Engineering

#### 1. Faculty profile, adequacy and competency of faculty

- 30 ECE faculty: Professors – 3(2+1); Assistant Professors – 5; Senior Lecturers – 4; Lecturers – 17  
Faculty qualifications: PhD – 1; Masters Degree – 28; UG – 1
- Faculty strength is adequate as the teacher: student ratio is 1:15
- The faculty are competent teachers, trained formally in pedagogy, and consistently produce 100% or nearly 100% results in the courses they teach.

#### 2. Student profile according to programmes of study, gender, region, etc

U.G B.E - EEE	Gender		Region			Total
	Boys	Girls	Tamil Nadu	Other State	Foreign	
II Year	67	79	140	4	2	146
III Year	78	79	143	3	11	157
IV Year	94	47	130	1	10	141
<b>Total</b>	239	205	413	8	23	444

**3. Changes made in the courses or programmes during the past five years and the contribution of the faculty to those changes**

2005-2006: Regulations 2004 of AU-Chennai – No changes made

2006-2007: Regulations 2004 of AU-Chennai – No changes made

2007-2008: List of new courses introduced in the 2007 Regulations of AUT-CBE and the corresponding courses of the R2004 AU-Chennai that were removed

2008-2009: List of new courses that were introduced and the corresponding courses that were removed

2010 (Autonomous Curriculum): Will be given by Dr. Karunakaran in the First year evaluation report.]

**4. Trend in the success rate and drop out rate of students during the last five years**

<b>Batch</b>	<b>No of Students</b>	<b>% Results</b>	<b>No of Students Placed (ON, OFF Campus and after leaving Campus)</b>	<b>Higher Studies &amp; Entrepreneurship</b>
2002 –06	100	88	61% (50/82)	10
2003 –07	98	92	74.4% (58/78)	10
2004 –08	98	92	91.6% (76/83)	5
2005 –09	144	91.67	50.65% (47/94)	25
2006 –10	142	97.22	65% (65/100)	10

- The drop out rate is negligible.

**5. Learning resources of the department like library, computers, laboratories and other such resources**

**• Laboratories : Seven Labs**

- a. Electronics Lab
- b. Microwave/Optical Lab
- c. VLSI lab
- d. DSP Lab
- e. LIC Lab
- f. Microprocessor Lab
- g. Communication Lab

**Equipments:**

<b>Equipment</b>	<b>Quantity</b>
Total No. of Computer's in ECE Dept.	158
Internet Connection	30
VHP	2
OHP	2
Printer Dot Matrix	6
Printer Laser (B/w)	1
Printer Laser Colour	0

- **Department Library:**

<b>Item</b>	<b>Quantity</b>
Total No of Books	2140
No of Titles	247
Journals	5
Tutorial CDs	-
Television with DVD Player	1

- One internet access point is available in the department for every two faculty members (six internet-enabled computers)

**6. Enhancement of the learning resources during the past five years.**

- There has been a four-fold increase in the number of learning resources in the past five years, from 448 books in 2006 to 2140 in 2010.

**7. Modern teaching methods in practice other than the lecture method**

Organizing Technical Lectures from Resource Persons (from ISRO) to enhance the Technical skills of the ECE

- i. Seminars
- ii. Mini projects
- iii. Power point presentations
- iv. Assignments
- v. EDUSAT

- vi. Innovations
- vii. Industrial visit
- viii. Guest lectures from experts
- ix. Industrial based workshop and services

**8. Participation of teachers in academic and personal counselling of students**

1. Periodical academic and non academic counselling for the entire department Students by Faculty advisors and class Counsellors.
2. Arranging Placement Oriented Programme for all the department Students
3. Arranging guest lecture and technical seminars for all department students to have more exposure and latest technological developments.

**9. Details of faculty development programmes and teachers who benefited during the past five years**

	<b>Year</b>	<b>05-06</b>	<b>06-07</b>	<b>07-08</b>	<b>08-09</b>	<b>09-10</b>
<b>Programmes</b>	No. of National conference attended	5	6	4	10	10
	No. of International conference attended	1	3	3	5	18
	No. of Workshops/ Seminar Attended	16	20	8	8	2
	No. of Papers published in Journals	-	1	5	5	13
	Invited Lectures	6	11	7	6	-
	Pedagogy	2	5	7	12	3

## **10. Participation of teachers in academic activities other than teaching and research**

- Involved as Class Counsellors (to regularly liaise with and keep day-to-day records of a designated class of students) and as Faculty Advisors (for counselling of an assigned group of students)
- Compiling / authoring course material for most of the theory courses assigned and developing lab manuals for the lab courses assigned
- Organising industrial visits for students and accompanying them during visits
- Organising conferences, seminars, guest lectures, student symposia, SDPs, student internships, etc
- Involved as Coordinator/Joint Coordinator for departmental Learning Resources Centre (Library)
- As resource persons for department's continuing education courses
- As Coordinators for placement training and organising on-site or off-site interviews for student placement
- Visiting industry periodically to enhance industry-academia interaction
- As guest lecturers/resource persons invited by other colleges
- As trainers for faculty or student development (department and college level)



**11. Collaborations with other departments and institutions at the national and international level and their outcome during the past five years**

**Continuing Education**

* MATLAB and Applications *Advanced Microcontrollers (2006-2008)	5 Lakhs
PCB design& Fabrication (2008-2010)	1,64,000

**12. If research is a significant activity, what are the thrust areas of the department**

- Signal and Image processing
- Embedded Systems
- Nano Technology
- Wireless Networks

**13. Details of the ongoing projects and projects completed during the last five years**

- Identification and counting of fertile pollen grains using MIP.
- Weed Detection Using Multi Resolution Analysis. This Project Received “Best Innovative Project Award-2009” from Indian National Academy of Engineering (INAE) New Delhi.
- Texture Based Weed Detection Using Multi Resolution Combined Statistical and spatial Frequency.

- Texture Based Weed detection in agricultural field using MRCSF.
- Crop and Weed Discrimination in Agricultural Field using MRCSF.
- Motions blur detection in liquid system display using Richardson Lucy Algorithm
- Classification and segmentation approach for Hepatic Tumor detection using Support Vector Machine
- Detection of tumor in MR Images using SOM (Self organizing maps – Neural Networks).
- Wavelet Based Colour Image Compression
- Face Recognition Using Neural Networks
- Texture Image Classification using co-occurrence matrix
- MRI Segmentation Using Neural Networks
- Implementation of RSA algorithm using TMS320C6201 processor
- Image Compression Using Wavelet Transform
- Image Analysis using DFT and Wavelet Transform
- Digital Image Processing Package (DIMPAC)
- Texture Image Classification Using MRF
- Texture Image Classification Using Gabor Filtering and WSF
- Texture Image Segmentation Using Co-occurrence Matrix
- Rotation Invariant Texture Image Classification Using Radon.
- Software Defined Radio (SDR)
- Blur insensitive Texture Image Classification
- Hand written text to Digital Text Conversion using Digital Image Processing

**14. Publications of the faculty, for the past five years. Details regarding citation index and impact factor**

<b>S.no</b>	<b>Name of the staff</b>	<b>Citation index</b>	<b>Impact factor</b>
1.	Dr.R.S.Sabeenian	13	0.765

**15. Participation of the department in the extension activities of the college**

- At least two continuing education courses are organised every year.

**16. Method of continuous student assessment**

- One-hour test per course on Mondays and Wednesdays; Papers evaluated by Friday; Retest for absentees and below-par students on Saturday afternoons.
- Three weekly tests per course per semester
- University pattern model examinations for all theory and lab courses
- Assignments and Motivated Study Projects, at least two per course per semester
- Internal marks: 50% marks; Anna University exams: 50% marks
- Under autonomous system (2010 onwards) internal: external marks 25: 75

**17. Placement record of the past students and the contribution of the department to the student placements**

- The ECE department organises all of its placement activities.
- CTS organised 1 day workshop on the Cognition Evolved in the year 2008 – 120 students participated
- UNA consultant Bangalore conducted placement workshop for GD, aptitude, Mock interview in the year 2009-120 students participated
- TIME – organised aptitude workshop for 111 students in the year 2010
- 50% in 2009 and 65% in 2010 placement for the two years.
- Average monthly salary of placed students has gone up from Rs 8,000/- in 2009 to nearly Rs 20,000/- in 2010.

**18. Significant achievements of the department, faculty or students during the past five years**

**STAFFS**

**Prof.B.Gopi**

- "I – Fuel Indicator" Renesas Microcontroller Project Contest

**Dr.R.S.Sabeenian**

- "Best Faculty Award" for the Academic year 2009-2010 in the ECE/EEE Stream from the Nehru Group of Institutions
- Best innovative project award for "Weed Detection using Multi-Resolution Analysis" from Indian National Academy of Engg, New Delhi.

- “Best Paper Award” for the following research papers in the year 2010
- “Hand written Text to Digital Text Conversion uses Radon Transform and Back Propagation Network (RTBPN)” in the Springer LNCS, during the International Conference on Advances in Information and Communication Technologies ICT 2010 held on September 2010 at Cochin
- “Multi Resolution Adaptive Video Streaming using Scalable Video Coding” in the IEEE Explorer, during the International Conference on Advances in Communication, Network and Computing CNC 2010 on October 2010 at Calicut
- Awarded the Best R& D activity award from the year 2006 to 2008

**Prof.D.Jayanthi**

- ✓ ISTE-NIT Kozhikode National Award 2007 for Best B.Tech. Project”  
Alcohol Carbon Mono-Oxide Monitoring Equipment”

**STUDENTS**

S.No	Name	University Rank	University
1	Mr.S.Senthil Balaji	1	Periyar
2	M.Ramyasri	2	
	P.T.Selvi	6	
	R.Ruchit Sharma	7	
	G.Venkata Subaramani	8	
	S.Sathish Kumar	11	
	K.Vijay	12	

S.No	Name	University Rank	University
3	S.M.Sharmila	18	Anna University
	R.Udaya Dhurga	43	
4	K.Sindhu	7	
	B.Venkateswari	32	
	C.Amsaveni	39	

### **19. Involvement of students in academic/co-curricular and other activities of the department**

Students participating in academic activities

- Symposia - 36, Guest Lectures - 5, Workshops - 2, In-plant Training - 15, Industrial Visits – yearly once, Placement Training – 351 (2008-2010), etc

Student participating in co-curricular activities

- Intra – college competitions: Paper Presentation - 62; Poster Presentation- 10;
- Technical Quiz – 10

Student participating in extra-curricular activities

- Sports and Games - 15; Yoga -Nil; Cultural Activities – 25

### **20. Innovations and best practices initiated/adopted by the departments during the last five years**

- Strategic planning and implementation
- Credit Point System for student soft skills development
- Faculty Advisor Counselling Record
- Two-week and two-month student feedback on teaching-learning process
- Regular workshops for student.

- Departmental motivational awards for commendable student academic performance and best outgoing students
- Environmental-friendly principles in practise in the department
- Sona-SIPRO, PCB

University specifies innovations as a part of exercise to students. Hence studies of new / additional topics are given as innovations.

- Identification and counting of fertile pollen grains using MIP.
- Weed Detection Using Multi Resolution Analysis. This Project Received “Best Innovative Project Award-2009” from Indian National Academy of Engineering (INAE) New Delhi.
- Texture Based Weed Detection Using Multi Resolution Combined Statistical and spatial Frequency.
- Texture Based Weed detection in agricultural field using MRCSF.
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- Classification and segmentation approach for Hepatic Tumor detection using Support Vector Machine
- Detection of tumor in MR Images using SOM (Self organizing maps – Neural Networks).
- Wavelet Based Colour Image Compression
- Face Recognition Using Neural Networks
- Texture Image Classification using co-occurrence matrix

- MRI Segmentation Using Neural Networks
- Implementation of RSA algorithm using TMS320C6201 processor
- Image Compression Using Wavelet Transform
- Image Analysis using DFT and Wavelet Transform
- Digital Image Processing Package (DIMPAC)
- Texture Image Classification Using MRF
- Texture Image Classification Using Gabor Filtering and WSF
- Texture Image Segmentation Using Co-occurrence Matrix
- Rotation Invariant Texture Image Classification Using Radon.
- Software Defined Radio (SDR)
- Blur insensitive Texture Image Classification
- Hand written text to Digital Text Conversion using Digital Image Processing

## **21. Development and expansion plans of the department for the next 5 years**

- An independent block with **well-equipped laboratories** and **self-sufficient facilities**, including **Conference Room, Seminar Hall, , R-and-D Centre, Placement Training Centre, Student and Staff Welfare Centre**, etc (2013).
- An national conference in 2013-2014
- Enhanced research activities (2011-2015)
- Enhancement of interaction with industry (2010-2015)
- Enhancement of continuing education courses (2010-2015)

## **22. Any other highlights**

- a. NBA accredited**



## **EMBEDDED SYSTEM:**

### **Objectives:**

To enable students to get profession in microcontrollers of various company. (ATMEL, PHILIPS, Microchip Renesas) Depending upon their requirement Complete the project successfully and apply for Patent.

### **Activities:**

Training the students to understand basics of processor programming the processor code and processor Debugging. Allocation and completion of Projects. Short term courses for UG and PG students on Embedded system.

## **SONA SIPRO**

(SONA Signal and Image **PRO**cessing **R**esearch Centre)

SIPRO welcomes researchers in Digital Signal and image processing field to work hand-in-hand to achieve the mystery in this field, its effect to specialize in the processing of information.

### **Objectives:**

To specialize in the processing of data delivered by electronic eyes and to obtain reliable information from the millions of data.

To publish papers in National/International Conferences and Journals.

**Activities:****Research and Development**

- 1) Accurate Image classification in textile industry, agricultural, leather industry and medical applications and hence solving real time issues.
- 2) Texture image classification and segmentation as per requirements.
- 3) Designing effective algorithms in Image Restoration, Enhancement and Compression.

**Training:**

1. Offering Short term courses in Digital Image Processing (DIP) and Digital Signal Processing (DSP) using MATLAB.
2. Guidance for students projects (UG/PG).
3. Guiding potential research scholars to do quality research in signal and image processing.

**SONA PCT****OBJECTIVES:**

To provide industry oriented training in PCB design, Fabrication, Assembling & Testing and also have tie up with up growing Electronics industries for making PCBs.

## **ACTIVITIES:**

### **1) TRAINING**

Training offered on PCB Design and Fabrication for 75 students in and around SONA.

### **2) CONSULTANCY:**

Consultancy services offered in the areas of PCB Design and Fabrication for students, local industries and for ISRO projects handled by SONA SPEED.

**Revenue Generated: Rs. 2 Lakhs**

### **PCB DESIGN :**

1. For PCB Design, the “Cadence Allegro” software is very much suited for making the PCB design requirements as industrial standards. It is user friendly and satisfies the industrial requirements to design the PCB in different layers.
2. By cadence Allegro editing and autorouting is easy and its easy to managing the different layers.
3. PCB design in orcad the layer selection and the editing of design is difficult.

## **C.Evaluative Report of the Department**

### **Department of Computer Science and Engineering**

#### **1. Faculty profile, adequacy and competency of faculty**

- 30 faculty members
  - Professors – 2; Assistant Professors – 7;  
Senior Lecturers – 2; Lecturers – 19
- Faculty qualifications
  - PhD – 2; Masters Degree – 26; UG – 2
- Faculty strength is adequate as the teacher: student ratio is 1:15
- The faculty members are competent teachers, trained formally in pedagogy and consistently produce 100% or nearly 100% results in the courses they teach.

#### **2. Student profile according to programmes of study, gender, region, etc**

- Our department offers an undergraduate programme (BE-CSE) and two postgraduates programmes ME-CSE and ME –SE
- Total student strength
  - 547 students (first year to final year) for UG
  - 71 students (first to second year) for PG
- Male student:248: Female Student :325
- Total current student strength (excluding first year UG) - 489  
Tamilnadu - 469; other state - 11; Foreign - 9;

**3. Changes made in the courses or programmes during the past five years and the contribution of the faculty to those changes**

- 2005-2006: Regulations 2004 of AU-Chennai – No changes made \*
- 2006-2007: Regulations 2004 of AU-Chennai – No changes made
- 2007-2008:
  - Open Source System, JavaProgramming, Advanced C Programming are the new course introduced in 2007 Regulation, Anna Univeristy of Technology, Coimbatore
  - Visual Programming is removed from Regulation 2004 Anna University, Chennai.
- 2008 - 2009:
  - PC Hardware and Trouble Shooting, Formal Languages and Automated Theory are the new courses introduced in Regulation 2008, Anna Univeristy of Technology, Coimbatore
  - System Software is removed from regulations 2007 Anna Univeristy of Technology, Coimbatore.
- 2009-2010 : Regulation of 2008of Anna University of Technology,Coimbatore –  
No changes made
- No faculty contribution in curriculam and regulation as Sona College of Technology is affiliated to Anna University, Chennai till 2006-2010 batch and affiliated to Anna University of Technology, Coimabtore 2007-2011 batch onwards.

- 2010-2011

SCT is conferred Autonomous status in the academic year 2010-11. Advanced C Programming Theory and C Programming Laboratory courses are newly added to the II Semester curriculum for the benefit of students.

**4. Trend in the success rate and drop out rate of students during the last five years**

- Academic results: 2003-07 batch- 96%, 2004-08 -95% ,2005-09 batch – 97%; 2006-10 batch – 96.96%
- The drop out rate is 2%

**5. Learning resources of the department like library, computers, laboratories and other such resources**

- The CSE Department's Learning Resources Centre (LRC) has,
  - Adequate reading-room space (an exclusive room)
  - Titles - 989; volumes - 3094; Journals -32 Tutorial CDs-32
  - Computers with internet connection for students use
  - A 'Career Corner' with relevant resources
- One internet access point is available in the department for every two faculty members (16 internet-enabled computers)
- Teaching aids: 4VHPs are fixed in four classrooms. In addition, 2 standalone VHPs, 2 OHPs and 3 laptops and NetBooks are available

## **6. Enhancement of the learning resources during the past five years.**

- There has been a two-fold increase in the number of learning resources in the past five years, from 1627 books in 2006 to 3094 in 2010
- Also, there is a proportional increase in number of computers in the past five years from 125 computers in 2006 to 248 in 2010

## **7. Modern teaching methods in practice other than the lecture method**

- Organizing Technical Lectures (Resource Persons from reputed organisations like ISRO,CTS, Wipro, IBM and Infosys) to enhance the technical skills of CSE students
- Professional and Technical Association activities (CSI, IEEE and ISTE)
- The modern teaching methods currently prevalent are Seminar, Group Discussion, Quiz, Team Teaching, Demonstration, Field trip, In-plant training, Project presentation, video conferencing, Webinars etc

## **8. Participation of teachers in academic and personal counselling of students**

- The students are divided into groups of around 20 each and assigned to the faculty such that every faculty acts as a 'Faculty Advisor' for a specific group of students
- There is a counselling hour every week, such that every student is counselled once in a fortnight on academic or personal matters
- The Faculty Advisors maintain all counselling records

**9. Details of faculty development programmes and teachers who benefited during the past five years**

Over the last five years (2005-2010), the total number of faculty who have benefitted from various faculty development programmes are listed below:

- National Conferences – 64
- International Conferences – 9
- Technical Seminar/Workshops/Pedagogical Training – 87
- Invited lectures – 41

**10. Participation of teachers in academic activities other than teaching and research**

- Involved as Class Counsellors (to regularly liaise with and keep day-to-day records of a designated class of students) and Faculty Advisors (for counselling of an assigned group of students)
- Compiling / authoring course material for most of the theory courses assigned and developing lab manuals for the lab courses assigned
- Organising industrial visits for students and accompanying them during visits
- Organising conferences, seminars, guest lectures, student symposia, Staff Development Programmes, student internships, etc
- Involved as Coordinator/Joint Coordinator for departmental Learning Resources Centre (Library)
- As resource persons for department's continuing education courses



- As Coordinators for placement training and organising on-site or off-site interviews for student placement
- Visiting industry periodically to enhance industry-academia interaction
- As guest lecturers/resource persons invited by other colleges
- As trainers through technology based Education and Evaluation
- As trainers for faculty or student development (department and college level)
- Involved in Academic reform, examination reform and student non formal education.

**11. Collaborations with other departments and institutions at the national and international level and their outcome during the past five years**

- A National Conference on “Innovative Computational Intelligence & Security System “NAC-CISS’07” – sponsored by AICTE & ISTE was conducted by our department, IT and MCA on 2-3, Feb 2007
- ISTE Regional Conference on “Strategies for Enhancing Research in Technical Institutions”, organized by ISTE–New Delhi and TN & P Section and Sona College of Technology, Salem on 13-14, Nov 2009
- A National Level Technical symposium “Threads 10” sponsored by CSI was conducted by our deapartment
- A National Level Technical symposium “Threads 06” sponsored by CSI and ISTE was conducted by our deapartment
- MoU with ICTACT, Tamilnadu. The staff of Sona will be trained by ICTACT to make the students readily available for corporate sectors. Faculty members and students would receive the funds for research and development activities.

**12. If research is a significant activity, what are the thrust areas of the department**

- Wireless Sensor Network
- Data Mining
- Bioinformatics
- Information Retrieval
- Artificial Intelligence
- Web Services
- Network Security

**13. Details of the ongoing projects and projects completed during the last five years**

**Ongoing Projects:**

- Mobile Application for Apple Mac system
- Securing Wireless Ipv6 Networks against DDoS Attacks
- Development of a Test bed to Study the Performance of Multimedia Applications in the Current Internet
- Predictive analysis of clinical databases
- Design and development of Association Rule based actionable Knowledge discovery Techniques

**Completed Projects:**

- Quality of Service support for wired networks
- Analysis of Active Queue Management Algorithms for wireless AdHoc Networks

- FIFO\_VQ Scheduler for Grid sim v 4.1
- Enhanced routing protocol for mobile ad-hoc network
- Structural Health Monitoring using Wireless Sensor Networks
- Mining Gene Expression data using clustering techniques and Patient Record Clustering
- A Framework develop for identifying causes a symptoms of Chikungunia diseases
- Design and Development of Building plans storage, project management system ,WLAN Implementation

**14. Publications of the faculty for the past 5 years.Details regarding citation index and impact factor.**

<b>Name of the Staff</b>	<b>Publications</b>	<b>Impact Factor</b>
Dr.M.Usha	International Journal of Business Information Systems	0.8
	Journal of Computer Society of India	-
	Asian Journal of Information Technology	-
	International Journal of Computer Science and System Biology	-
	WSEAS Transactions on Information Science and Applications	0.1
Dr.B.Sathiyabhama	Journal of Current Science	0.2
	International Journal of Computational Intelligence and Healthcare Informatics	-
	IJCSES International Journal of Computer Sciences and Engineering System	-
	<b>Average Impact Factor</b>	<b>0.36</b>

## **15. Participation of the department in the extension activities of the college**

(1) Providing value added courses through Continuing Education (2) Consultancy service through Networking, Web Hosting, Web Designing etc., (3) Research and development (5) IBM Centre of Excellence (6) Infosys Campus Connect Programme (7) Oracle Academy (8) Centre of Excellence for Sona NET (9) Centre of Excellence for Sona MINE (10) Acting as a chief superintendent for conducting Anna University, Coimbatore examinations, Overall coordinator of the CSI (11) Acting as a member secretary, Academic council of the College

## **16. Method of continuous student assessment**

- One-hour test per course on Mondays and Wednesdays; Papers evaluated and distributed to the students by Friday; Retest for absentees and below-par students on Saturday afternoons; Weekly test in Maths courses – every Friday (duration -one hour)
- Three weekly tests per course per semester
- Model examinations (University pattern ) for all theory and lab courses
- Assignments and Motivated Study Projects - at least two per course per semester
- Internal evaluation: 50% marks; Semester (University)examination: 50% marks
- Under autonomous system(2010 onwards) internal: external marks is 25:

75

**17. Placement record of the past students and the contribution of the department to the student placements**

2002 – 2006 -41%

2003 – 2007 -67%

2004 – 2008 -74%

2005 – 2009 -52%

2006 – 2010 -80%

- A pre-scheduled placement training plan is implemented at the departmental level every year
- Average monthly salary of placed students has gone up from `13000 in 2009 to nearly `18000 in 2010

**18. Significant achievements of the department, faculty or students during the past five years**

**Faculty:**

- Dr.M.Usha and Dr.B.Sathiyabhama are Recognized supervisors in Anna University of Technology, Ciombatore
- Dr.M.Usha was recognized in Marquis Who's who in the world, USA in the year 2008
- Dr.B.Sathiyabhama was recognized in Marquis Who's who in the world, USA and Cambridge Who's who in the world in the year 2010
- CSI Salem chapter office bearers: Dr M.Usha - Vice Chair and Dr B.Sathiyabhama - Secretary
- Dr.B.Sathiyabhama is invited as a speaker in International Conference and Exhibition on Proteomics and Bioinformatics to be held in hyderabad on Jan 27-29, 2011

## **Students:**

### **a) University Results**

- The Computer Science Department of Sona College produces university rank holders every year

### **b) Student achievements**

- 10 teams were participated in face to face evaluation, IBM Great Mind Challenge
- Ms.A. Shobana and Mr. Ram Shankar won the best project award in M/S Honeywell Technologies, Bangalore.
- G. Srinivasan (2006-10) presented a paper “Load balancing for mobile network ” in BITS Pilani
- C. Oswald(2005-09) presented a paper “Image processing in parallel computer using Beowulf clusters” in BITS Pilani
- C. Oswald(2005-09) presented a paper in 58<sup>th</sup> International Astronautical Congress held in Hyderabad in Sep 2007.
- C. Kavya (2006-10) won the meritorious sportsmen for employment given by Anna University sports board, Chennai
- Every year, students (BE & ME) taking up project internship at reputed organizations (Honeywell, Checktronic, Mukesh associates and, Cognizant Technologies)

### **c) University Ranks**

- 2004-2008 Batch: Four university ranks (10, 11, 30 and 36) in Anna university, Chennai

- 2005-2009 Batch: One university rank (45<sup>th</sup>) in Anna university, Chennai
- 2006-2010 Batch: One university rank (11<sup>th</sup>) in Anna university, Chennai

**19. Involvement of students in academic/co-curricular and other activities of the department**

- Students participating in academic activities
  - Symposia – Organised 3 Symposium Participation:489
  - Workshops – 30
  - In-plant Training – 36
  - Industrial Visits – 8
  - Placement Training -130
- Student participating in co-curricular activities
  - Intra-college competitions
    - Paper Presentation – 30
    - Technical Quiz – 15
  - Inter-college competitions:
    - Paper Presentation – 40
    - Technical Quiz – 14
- Student participating in extra-curricular activities
  - Sports and Games – 56
  - Cultural Activities – 40

**20. Innovations and best practices initiated/adopted by the departments during the last five years**

- Strategic planning and implementation
- Credit Point System for student soft skills development
- Exclusive record maintenance for Faculty Advisor Counselling
- Arrears Clearance Plans-Slowrunners are given special coaching
- Periodic motivational handouts for staff and students
- Student feedback on teaching-learning process done twice in a semester
- Regular workshops for student soft-skills development
- Identification of student and faculty learning styles
- Self-evaluation of faculty using a specific format
- Motivational awards for commendable student academic performance and best outgoing students
- Energy efficient computing principles are practised in the department

**21. Development and expansion plans of the department for the next 5 years**

- An independent block with **well-equipped laboratories** and **self-sufficient facilities** including **Conference Room, Seminar Hall, Learning Resources Centre (LRC), R&D Centre, Placement Training Centre, Student, Staff Welfare Centre**, etc (2011).
- To obtain funding for R & D projects from agencies like ISRO, DST, AICTE and DIT
- To form different clubs like software development club, innovative idea club, problem solving club and demonstration club
- An international conference is scheduled in 2012-2013



- Establishment of an Industrial Training Centre in 2012-2013
- Enhanced research activities and quality publications are our continuous objectives
- Enhancement of Industry/Institute interaction in 2010-2015
- Enhancement of continuing education courses in 2010-2015

## **22. Any other highlights**

- The department is recognised as a research centre for Ph.D by Anna University of Technology, Coimbatore
- B.E. CSE programme has been accredited by NBA
- The department has two centres of excellence (SonaNet and SonaMine)

### **SONANET (SONA NETWORK COMPUTING RESEARCH CENTRE)**

#### **Objectives:**

- To develop new architecture / Technologies in Networking and related areas
- To provide consultancy services tailored to the needs of organizations for innovative IT solutions in these areas

### **SONAMINE (CENTER FOR DATAMINING AND DATA SYSTEM DESIGN)**

#### **Objectives: -**

- To develop pioneering tools and applications applied to database and data mining
- To obtain patents for the framework developed

## **C. Evaluative Report of the Department**

### **Department of Information Technology**

#### **1. Faculty profile, adequacy and competency of faculty.**

- Faculty members: 25. (Professors: 3, Assistant Professors: 9, Senior Lecturers: 2 Lecturers: 11)
- Professors qualified Ph.D: 2.
- Research scholars: 13
- Nearly 50% of the faculties were above 10 years of experience.

#### **2. Student profile according to programmes of study, gender, region etc.**

- 4 years. B.Tech IT programme is offered.
- Total student strength – 430 students (II year to IV year). Male: 202, Female: 228
- Region: Tamilnadu – 419 students; Other State: 1; NRI: 10.

#### **3. Changes made in the courses or programmes during the past five years and the contribution of the faculty to those changes.**

- 2005-2006: Regulations 2004 of AU-Chennai – No changes made.
- 2006-2007: Regulations 2004 of AU-Chennai – No changes made.
- 2007-2008: New courses were introduced in the 2007 Regulations of AUT-CBE and some courses of the R2004 AU-Chennai were removed.

- 2008-2009: New courses were introduced and some courses were removed.
- 2010-2011: (Autonomous Curriculum): New courses were introduced in the II semester.
- No faculty contribution is made from 2005-2010, since the institution is affiliated to Anna University, Chennai from 2005-2007 and Anna University of Technology, Coimbatore from 2007-2010.

**4. Trend in the success rate and drop out rate of students during the last five years.**

Batch	Success rate	Drop out rate
• 2002-2006	85.15%	14.85%
• 2003-2007	92.23%	7.77%
• 2004-2008	97.00%	3.00%
• 2005-2009	97.03%	2.97%
• 2006-2010	91.26%	8.74%

**5. Learning resources of the department like library, computers, laboratories and other such resources.**

- Department Library Books: 956.
- Journals: 18 National and 36 International Journals.
- CD's: 128.
- Video Lectures: 7
- Computer Labs: 4
- Computers: 350

**6. Enhancement of the learning resources during the past five years.**

- CCNA Certification.
- RHCE Certification.
- IBM WAS, WSAD Certification.
- HP IT Essentials and Sun Certification.
- Library books: 626 books in 2006. 956 book in 2010.

**7. Modern Teaching methods in practice other than the lecture method.**

- Guest Lecture, Seminars, Group Discussions, Demonstration and Practice, Industrial Visit, In-plant Training, Project Work, Team Teaching, Case Study and Webinars.

**8. Participation of teachers in academic and personal counseling of students.**

- Weekly Test will be conducted for all subjects in three Cycles.
- Assignments will be given.
- For every 10 students there will be a faculty advisor for monitoring the students on their performance, attendance, need for personality development, Inspiring Awards, discipline, dress code and avoiding the cell phone use in the college campus. All the above details were monitored and counseled.
- SPA Form (Students Performance Analysis) – use to analysis the performance of the students in their weekly test.
- Intensive Coaching and Model exam will be conducted at the end of the semester to improve their marks in the University examinations.

## **9. Details of faculty development programmes and teachers who benefited during the past five years.**

Over the last five years (2005-2010), the total number of faculty who have benefitted from different development programmes are as listed below:

- National Conferences attended – 23
- International Conferences attended – 16
- Technical Seminars attended – 35
- Workshops attended – 50
- Pedagogical Training attended– 9
- Faculty development programme on “Computer Architecture” was organised from 21-11-05 to 26-11-05 (1 week); nearly 15 staff members were benefited.
- Faculty development programme on “Software Engineering” was organised from 04-12-07 to 16-12-07 (2 weeks); nearly 27 staff members were benefited.
- Staff development programme on “Open Source Systems (Applications of Linux Apache MySQL Php/Python) - **LAMP**” was organised from 06-07-09 to 10-07-09 (1 week); nearly 30 staff members were benefited.

## **10. Participation of teachers in academic activities other than teaching and research.**

- Pedagogical Training, Faculty training, attending seminar, workshop and technical events.

- Staff members are representing national and International conference and symposium and acting as Juries / Judges and also various technical events.
- Involved as Class Counsellors (to regularly liaise with and keep day-to-day records of a designated class of students) and as Faculty Advisors (for counselling of an assigned group of students).
- Compiling / authoring course material for most of the theory courses assigned and developing lab manuals for the lab courses assigned.
- Organising industrial visits for students and accompanying them during visits.
- Organising conferences, seminars, guest lectures, student symposia, SDPs, student internships, etc.
- Involved as Coordinator/Joint Coordinator for departmental Learning Resources Centre (Library).
- As resource persons for department's continuing education courses.
- As Coordinators for placement training and organising on-site or off-site interviews for student placement.
- Visiting industry periodically to enhance industry-academia interaction.
- As guest lecturers/resource persons invited by other colleges.
- As trainers for faculty or student development (department and college level)

**11. Collaborations with other departments and institutions at the national and international level and their outcome during the past five years.**

- A National Conference on “**Innovative Computational Intelligence & Security System “NAC-CISS’07”** – sponsored by AICTE & ISTE was conducted by our dept., CSE and MCA on 2<sup>nd</sup> and 3<sup>rd</sup> of Feb’07.
- ISTE Regional Conference on “Strategies for Enhancing Research in Technical Institute organized by ISTE –New Delhi – TN & P Section and Sona College of Technology, Salem on 13-11-09 and 14-11-09.

**12. If research is a significant activity, what are the thrust areas of the department.**

- Computer Networks, Network Security, Data Mining, Open Source Software, Image Processing, Web Services.

**13. Details of the ongoing projects and projects completed during the last five years.**

- **Ongoing Projects:**

- **Indira Gandhi Centre for Atomic Research, Kalpakkam, Chennai.**

- a) UML 2.0 based modeling and automatic code generation for Embedded System important to safety for Fast Breeder Reactor (FBR).
- b) MISRA ‘C’ Rule checker for Real time program.
- c) Open Source Tools (QT Graphics Library, Real time Java) based GUI for plant application on Linux platform.

- **Completed Projects:**

**Tamil Nadu State Council for Science & Technology**

- a) Remote Controlled PC(Student Projects Scheme). – (2004-2005)- Dt: 31-01-05)
- b) Use of Bright White LED's as street lights in rural areas - (Student Projects Scheme – (2006-2007)Dt: 06-12-06)

**M/s. Burning Glass, USA.& M/s. Checktronix India (P) Ltd.**

**Dharmapuri.**

- a) Focus – Web Based Applicant Tracking System.
- b) Component Based Interface for LENS.
- c) Alternatives for Multithreaded Application Performance Tuning.
- d) Alternatives for Lexes for Unicode Documents.
- e) Integrated CPM and CTM for automating the Specification Based Test case Generation.
- f) Relation Based Similarity Score Test Case Prioritization.

**M/s. Infosys**

- a) A test Framework to validate Applications upon deployment of Security Upgrades.

**14. Publications of the faculty, for the past five years. Details regarding citation index and impact factor.**

- Journal Publication: 13.
- Paper publications National/ International: 58
- Citation Index and impact factor: Nil.



**15. Participation of the department in the extension activities of the college.**

- Providing value added courses through Continuing Education.
- Providing Consultancy service through Networking, Web Hosting, Web Designing etc.,
- Research and development.
- FOSS Centre of Excellence.
- IBM Centre of Excellence.
- Infosys Campus Connect Programme.
- Centre of Excellence for Web services and Development. Sona Web.

**16. Method of continuous student assessment.**

- Weekly Tests, Assignments, Model Exams.
- Assignments given periodically and evaluated.
- Performance analysis / Student counseling.
- Uploading the test marks into the Management Information System.
- Informing parents about their wards' performances after every test-cycle.
- Parents have access to data on their wards' attendance and test performances.

**17. Placement record of the past students and the contribution of the department to the student placements.**

- **Placement record:** 2002-06: 43%, 2003-07: 61%, 2004-08: 79%, 2005-09: 35%, 2006-10: 50%.
- Department acted as communicating media between the alumni resource persons and the current final year students for having the technology and knowledge transfer.
- Technical mock interviews were conducted by the department for the final year students.

**18. Significant achievements of the department or faculty or students during the past five years Students.**

**University Ranks:**

- 2002-2006 Batch: 4 University ranks – 18<sup>th</sup>, 30<sup>th</sup>, 40<sup>th</sup> and 48<sup>th</sup> Ranks.
- 2003-2007 Batch: 3 University ranks – 21<sup>st</sup>, 38<sup>th</sup> and 4<sup>th</sup> Ranks.
- 2006-2010 Batch: 4 University ranks – 17<sup>th</sup>, 42<sup>nd</sup>, 45<sup>th</sup> and 48<sup>th</sup> Ranks.

**Placement:**

- Refer 17.

**Students Project:**

- **V. Ganesh Babu, K. Ezhilarasan and A. Kathikeyan – (2004-2006 Batch)** won the First Prize for the Project Model Presentation for the project titled “Remote Control PC” sponsored by the Tamil Nadu State Council for Science and Technology on 20-08-05.

- **Karthikeyan. T and Gowtham. P - (2003-2007 Batch)** won the First Prize for the Project Model Presentation for the project titled **“Use of Bright White LED’s as street lights in rural areas”** sponsored by the Tamil Nadu State Council for Science and Technology on 25-08-07.

#### **Student’s achievements:**

- **B. Manikandan** won the Gold Medal in Power Lifting (Men) held by the Anna University, Zone – VI Tournament (State Level) on 04-11-05.
- **Somasundaram. B. K of 2004-08 batch** had been selected in the **pH Test (National Level test with Stiff Competition)** conducted by M/s. eLitmus Evaluation Pvt. Ltd on 20-02-09.
- M/s. Opera Software congratulates **Sethu Raman. M. III year – B Sec** for achieved **Silver 2 level membership** for being one of the most active members of the Opera Campus Crew for the January-June semester 2010.
- **M. Muthukumar - III year – ‘C’ Sec.** participated and won the **Bronze Medal in Asian Power Lifting Championship (International)** held at Mongolia from 01-05-10 to 05-05-10.
- **P. Surya. IV year – ‘B’ Sec** has been selected as the Google Ambassador for the year 2010-2011. She has also been selected as one among 9 in the world this year. She is a past of Google’s Expert User Group representing 57 products, consisting of 100

members. She represents the Google products – Google Calendar, Google Groups and Google Talk.

- **Silambarasan. K. – III year (Microsoft Student Partner (MSP))** organized the Awareness programme on Microsoft “DreamSpark Yatra” – Sponsored by Microsoft IT Academy, Bangalore on 30-03-10.

**Department:**

- The institution is the **nodal centre for promoting free open source software (FOSS)** approved by **Anna University** and the Centre for Development of Advanced Computing (**CDAC**), a national resource centre for FOSS.
- One day **First Intellectual National Seminar on Applications of Network Security - ANS'09** was organized by the Association of IT on 11-04-09 in our P. G. Auditorium.
- Microsoft is creating an awareness programme for young engineering students (CSE, IT, ECE, EEE, MCA) to acquire knowledge on the latest technologies through their experts. In connection with that, **MICROSOFT DREAMSPARK Yatra** has been organized by the Department on March 30, 2010.

**Faculty:**

- **Prof. G. Prakash. Asst. Professor** was deputed for sabbatical work on Software Engineering Research at M/s. Infosys, Bangalore for a period of 8 weeks starting from 9<sup>th</sup> May 2007.

- **Mr. G. Prakash. Asst. Professor** has been selected for the IASc-  
INSA-NASI **Summer Research Fellowship in 2009** under the  
guidance of Prof. N. Balakrishnan, S. E. R. C Indian Institute of  
Science, Bangalore from 01-03-09.

**19. Involvement of students in academic/co-curricular and other activities  
of the department.**

- Students participating in academic activities
  - Symposia – 44
  - Workshops – 10
  - In-plant Training – 3
  - Industrial Visits – 5
  - Placement Training - 15
- Student participating in co-curricular activities
  - Intra-college competitions
    - Paper Presentation – 1
    - Technical Quiz – 5
  - Inter-college competitions:
    - Paper Presentation – 68
    - Technical Quiz – 14
- Student participating in extra-curricular activities
  - Sports and Games – 43
  - Cultural Activities – 9
  - Painting Competition – 4
  - NCC – 8

- Blood Donor's Club – 1
- Women Development Wing – 3
- YRC – 11
- NSS - 3

**20. Innovations and best practices initiated/adopted by the departments during the last five years.**

- Centre for Research and Development of Free Open Source Software

To develop projects using Open Source Technology based on the industry needs and problems and to promote Open Source awareness to be students and near by industries.

- IBM Centre of Excellence

To offer training in the best available software like WSAD, WAS and DB2, with continued access to further application of IBM's breakthrough technology.

- Centre for Infosys Campus Connect Programme

To facilitate student knowledge in the basics of IT and Computer Science Skills and to make them employable.

- Anna University Edusat Programme

To make an improvement in the quality of instruction, training and skill development.

- Indo – US/iitb E – Learning

Establishing an exclusive satellite interactive network and providing higher level learning in engineering subjects.

- Microsoft IT Academy

Established in the department of Information Technology to create awareness among faculties and students to know about the Microsoft products, training and certifications. The Microsoft IT Academy Program benefits for institutions that subscribe through a Microsoft Campus Agreement or Microsoft School Agreement are equivalent to the Advanced level program benefits like

- Rich, interactive e-learning.
- Essential computer skills training.
- Academic pricing on MOAC textbooks.
- Instant access to Microsoft Press books online.
- Academic pricing on Microsoft Certification exams.
- Become a Microsoft Certification testing center.
- One free Microsoft Certified Trainer (MCT) membership.

**21. Development and expansion plans of the department for the next 5 years.**

- To start 2 P. G. Programmes.
  - a) M. Tech – IT (Wireless Communication and Sensor Networks)
  - b) M. Tech – IT (Intelligent systems).
- To strengthen R & D centre's by incubating the ideas.
- To obtain funding for R & D projects from agencies like ISRO, DST, AICTE, DIT etc.
- To depute students to reputed institutions and industries for summer internship.

- To strengthen alumni interaction.
- To offer value added courses.
- To form different clubs like software development club, innovative idea club, problem solving club, demonstration club, etc.
- To provide mini projects to students in important practical subjects.
- To make project compulsory during summer vacation for II, III and IV years.

## **22. Any other highlights.**

- The department is producing university ranks consistently for the past 9 years.
- The department has two centers of excellence namely
  - center for free open source – focuses on developing software using open source systems
  - center for web services and development – focuses on development of personalized web services and ontology
- Mr. Prakash, AP/IT had attended sabbatical training on live projects in Infosys, Bangalore and IISc, Bangalore. He also disseminated the knowledge gained to his fellow teachers.
- The department is a recognized research center of Anna University, Coimbatore for guiding Ph.D scholars.
- The department has obtained a project using open source software from IGCAR, Chennai
- The department has also obtained a project on control systems from IIT, Mumbai.



- The department faculty has got research and staff development programme grants from AICTE for Rs. 5,00,000 and Rs. 7,00,000 respectively.
- The department has a good strength of alumni who are regularly visiting the department for training the students for placements.
- The faculty members have published their research works in reputed journals.

## **Evaluative Report of the Department**

### **Department of Civil Engineering**

#### **1. Faculty profile, adequacy and competency of faculty**

- 18 Civil faculty: Professors – 2; Assistant Professors – 4; Senior Lecturers – 4; Lecturers – 8 Faculty qualifications: PhD – 2; Masters Degree – 13; UG – 3
- Faculty strength is adequate as the teacher: student ratio is 1:13
- The faculty are competent teachers, trained formally in pedagogy, and consistently produce 100% or nearly 100% results in the courses they teach.

#### **2. Student profile according to programmes of study, gender, region, etc**

- Only one four-year BTech Civil Engineering programme is offered.
- Total student strength – 416 students (first year to final year)
- Male student: Female student ratio is about 269:147
- Total current student strength (excluding first year): 292

#### **3. Changes made in the courses or programmes during the past five years and the contribution of the faculty to those changes**

[Each department may provide information as follows:

2005-2006: Regulations 2004 of AU-Chennai – No changes made

2006-2007: Regulations 2004 of AU-Chennai – No changes made

2007-2008: **New Courses introduced**

- Basic Structural Design.
- Concrete and Highway Laboratory.
- Concrete Technology (Elective).
- Project formulation and management (Elective)
- Project formulation and management (Elective)

**Courses Removed:**

- Principles of Management.
- Municipal Solid Waste and Management (Elective)
- Intellectual Property rights (Elective)
- OOPS(Elective)
- Total Quality Management
- Habitat System and Design.
- Rock Engineering.
- Ecological Engineering.
- Design of Plate and Shell Structures.
- Wind Engineering.

2008-2009: **New Courses introduced**

- Municipal Solid Waste and Management (Elective)

**Courses Removed:**

- Principles of Architecture.
- Survey camp.
- Engineering Economics.

- Indian constitution and society(Elective)

**4. Trend in the success rate and drop out rate of students during the last five years**

- Four batches of students have graduated (2007, 2008, 2009 &2010).
- Academic results: 2009 batch – 89%; 2010 batch – 93%
- The dropout rate is negligible.

**5. Learning resources of the department like library, computers, laboratories and other such resources**

- Six Laboratories: Five labs equipped with latest equipment; the CAD Lab has 60 computers.
- The Civil Department's Learning Resources Centre (LRC) has,
  - Adequate reading-room space (an exclusive room)
  - No of Books - 584
  - 15 computers with internet connection for student use
  - A "Civilians Corner" with relevant resources
- One internet access point is available in the department for every two faculty members (Nine internet-enabled computers)
- Teaching aids: VHPs and computer sets – 3 sets (classroom use)

**6. Enhancement of the learning resources during the past five years.**

- There has been a increase in the number of learning resources in the past five years, from 60 books in 2006 to 584 in 2010.

## **7. Modern teaching methods in practice other than the lecture method**

- The modern teaching methods currently prevalent are Seminar, Group Discussion, Quiz, Team Teaching, Demonstration, Drill and Practice, Field Trip, In-plant training, Project Work, etc

## **8. Participation of teachers in academic and personal counselling of students**

- The students are divided into groups of around 20 each and assigned to the faculty such that every faculty acts as a 'Faculty Advisor' for a specific group of students.
- There is a counselling hour every week, such that every student is counselled once a fortnight on academic or personal matters.
- The FAs maintain all counselling records in an exclusive book.

## **9. Details of faculty development programmes and teachers who benefited during the past five years**

Over the last five years (2005-2010), the total number of faculty who have benefitted from different development programmes are as listed below:

- National Conferences – 30
- International Conferences – 12
- Technical Seminars – 10
- Workshops – 10
- Pedagogical Training – 8

## **10. Participation of teachers in academic activities other than teaching and research**

- Involved as Class Counsellors (to regularly liaise with and keep day-to-day records of a designated class of students) and as Faculty Advisors (for counselling of an assigned group of students)
- Compiling / authoring course material for most of the theory courses assigned and developing lab manuals for the lab courses assigned
- Organising industrial visits for students and accompanying them during visits
- Organising conferences, seminars, guest lectures, student symposia, SDPs, student internships, etc
- Involved as Coordinator/Joint Coordinator for departmental Learning Resources Centre (Library)
- As resource persons for department's continuing education courses
- As Coordinators for placement training and organising on-site or off-site interviews for student placement
- Visiting industry periodically to enhance industry-academia interaction
- As guest lecturers/resource persons invited by other colleges
- As trainers for faculty or student development (department and college level)

**11. Collaborations with other departments and institutions at the national and international level and their outcome during the past five years**

<b>S. No.</b>	<b>Collaboration with...</b>	<b>Purpose of Collaboration</b>	<b>Outcomes</b>
1	K.M.C Constructions, Hyderabad.	Training Consultancy for different levels of Employees	Several Training Programmes conducted

**12. If research is a significant activity, what are the thrust areas of the department**

- Concrete Technology.
- Earthquake Resistant Design.
- Water Distribution Network.

**13. Details of the ongoing projects and projects completed during the last five years**

- Concrete Technology : Ongoing projects – 4; Completed – 1
- Earthquake Resistant Design : Ongoing projects – 3; Completed – 1
- Water Distribution Network : Ongoing projects – 1; Completed – Nil

**14. Publications of the faculty, for the past five years. Details regarding citation index and impact factor**

Journal publications: 12; Conference publications: 20; Total – 32

### **15. Participation of the department in the extension activities of the college**

- Department takes up the “Masons Training Programme” for the upliftment of rural youth and so far two batches (50 Participants) have been trained.
- Continuing education courses are organised every year.

### **16. Method of continuous student assessment**

- One-hour test per course on Mondays and Wednesdays; Papers evaluated by Friday; Retest for absentees and below-par students on Saturday afternoons; Weekly test in Maths courses – every Friday, one hour
- Three weekly tests per course per semester
- University pattern model examinations for all theory and lab courses
- Assignments at least two per course per semester
- Internal marks: 50% marks; Anna University exams: 50% marks
- Under autonomous system (2010 onwards) internal: external marks 25: 75

### **17. Placement record of the past students and the contribution of the department to the student placements**

- The Civil Department organises all of its placement activities.

<b>Batch</b>	<b>Total Students</b>	<b>Campus Placement</b>	<b>Off Campus</b>	<b>Own Business</b>	<b>Higher Studies</b>
2003 – 07	61	34	16	0	11
2004 – 08	70	37	21	4	8
2005 – 09	65	13	40	6	6
2006 – 10	66	15	41	5	5

- Average monthly salary of placed students has gone up from Rs 8,000/- in 2007 to nearly Rs 12000/- in 2010.



**18. Significant achievements of the department, faculty or students during the past five years**

**a) University Results:**

- The Civil Engineering Department of Sona College stands within Top 10 in academic performance among the affiliated colleges under AU-Chennai offering Civil Engineering.

**b) Placement:** As stated above under Point 17.

**c) University Ranks**

- 2003-2007 Batch: Three University ranks 9<sup>th</sup>, 12<sup>th</sup> & 24<sup>th</sup> of only fifty ranks announced by the university.
- 2004-2008 Batch: Two University ranks 45<sup>th</sup> & 47<sup>th</sup> of only fifty ranks announced by the university.
- 2005-2009 Batch: One University rank 49<sup>th</sup> of only fifty ranks announced by the University.
- 2006-2010 Batch: Four University ranks 15<sup>th</sup>, 41<sup>st</sup>, 44<sup>th</sup> and 47<sup>th</sup> of only fifty ranks announced by the University.

**19. Involvement of students in academic/co-curricular and other activities of the department**

Students participating in academic activities

- Symposia - 40, Guest Lectures - 25, Workshops - 20, In-plant Training - 60, Industrial Visits - 20, Placement Training – 40.

Student participating in co-curricular activities

- Intra-college competitions: Paper Presentation - 60; Poster Presentation - 50; Technical Quiz – 50.
- Inter-college competitions: Paper Presentation - 60; Poster Presentation - 50; Technical Quiz – 50.

Students participating in extra-curricular activities

- Sports and Games - 60; Yoga -50; Cultural Activities – 100.

**20. Innovations and best practices initiated/adopted by the departments during the last five years**

- Team Teaching.
- Students Counselling Methods.
- Arrears Clearance Plans.
- Motivational Lectures by Faculty.
- Special lectures by visiting Faculty.

**21. Development and expansion plans of the department for the next 5 years**

- An exclusive Block Comprising of all facilities for the civil Engineering Department by 2012.
- An International conference in 2012 – 13.
- Introduction of M.E Programme in 2012 – 13.
- Enhanced research activities(2010 – 2015)
- Enhancement of industry interaction (2010 – 2015)
- Enhancement of Continuing Education Courses (2010 – 2015)

## **22. Any other highlights**

- The department is recognised as a research centre for PhD by Anna University of Technology - Coimbatore.
- The department is carrying out all construction and maintenance works in the Campus.

## **C.Evaluative Report of the Department**

### **Department of Fashion Technology**

#### **1. Faculty profile, adequacy and competency of faculty**

- 12 FT faculty: Professors – 2; Assistant Professors – 3; Senior Lecturers – 2; Lecturers – 5  
Faculty qualifications: PhD – 1; Masters Degree – 9; UG – 2
- Faculty strength is adequate as the teacher: student ratio is 1:15
- The faculty are competent teachers, trained formally in pedagogy, and consistently produce 100% or nearly 100% results in the courses they teach.

#### **2. Student profile according to programmes of study, gender, region, etc**

- Only one four-year BTech FT programme is offered.
- Total student strength – 250 students (first year to final year)
- Male student: Female student ratio is about 2:3 (107: 149)
- Total current student strength (excluding first year): 199  
Tamilnadu – 191 students; Kerala – 6; Karnataka – 2

#### **3. Changes made in the courses or programmes during the past five years and the contribution of the faculty to those changes**

[Each department may provide information as follows:

2005-2006: Regulations 2004 of AU-Chennai – No changes made

2006-2007: Regulations 2004 of AU-Chennai – No changes made

2007-2008: List of new courses introduced in the 2007 Regulations of AUT-CBE and the corresponding courses of the R2004 AU-Chennai that were removed

2008-2009: List of new courses that were introduced and the corresponding courses that were removed

2010 (Autonomous Curriculum): Will be given by Dr. Karunakaran in the First year evaluation report.]

**4. Trend in the success rate and drop out rate of students during the last five years**

- Only two batches of students have graduated (2009 and 2010).
- Academic results: 2009 batch – 93.44%; 2010 batch – 98.46%
- The drop out rate is negligible.

**5. Learning resources of the department like library, computers, laboratories and other such resources**

- Six Laboratories: Five labs equipped with industry-grade textile/garment equipment; the CAD Lab has 33 computers.
- The FT Department's Learning Resources Centre (LRC) has,
  - Adequate reading-room space (an exclusive room)
  - Titles - 636; volumes - ?; reference books - ?

- Two computers with internet connection for student use
- CBT packages in three textile courses
- A 'Career Corner' with relevant resources
- One internet access point is available in the department for every two faculty members (six internet-enabled computers)
- Teaching aids: VHPs and computer sets – 3 sets (classroom use)

**6. Enhancement of the learning resources during the past five years.**

- There has been a seven-fold increase in the number of learning resources in the past five years, from 93 books in 2006 to 636 in 2010.

**7. Modern teaching methods in practice other than the lecture method**

- The modern teaching methods currently prevalent are Seminar, Group Discussion, Quiz, Team Teaching, Demonstration, Drill and Practice, Field Trip, In-plant training, Project Work, etc

**8. Participation of teachers in academic and personal counselling of students**

- The students are divided into groups of around 20 each and assigned to the faculty such that every faculty acts as a 'Faculty Advisor' for a specific group of students.
- There is a counselling hour every week, such that every student is counselled once a fortnight on academic or personal matters.
- The FAs maintain all counselling records in an exclusive book.

**9. Details of faculty development programmes and teachers who benefited during the past five years**

Over the last five years (2005-2010), the total number of faculty who have benefitted from different development programmes are as listed below:

- National Conferences – 8
- International Conferences – 7
- Technical Seminars – 11
- Workshops – 7
- Pedagogical Training – 11

**10. Participation of teachers in academic activities other than teaching and research**

- Strategic planning and implementation – every faculty is either a Thrust Area Managers or a Joint Thrust Area Managers for thrust areas identified for departmental development
- Involved as Class Counsellors (to regularly liaise with and keep day-to-day records of a designated class of students) and as Faculty Advisors (for counselling of an assigned group of students)
- Compiling / authoring course material for most of the theory courses assigned and developing lab manuals for the lab courses assigned
- Organising industrial visits for students and accompanying them during visits

- Organising conferences, seminars, guest lectures, student symposia, SDPs, student internships, etc
- Involved as Coordinator/Joint Coordinator for departmental Learning Resources Centre (Library)
- As resource persons for department's continuing education courses
- As Coordinators for placement training and organising on-site or off-site interviews for student placement
- Visiting industry periodically to enhance industry-academia interaction
- As guest lecturers/resource persons invited by other colleges
- As trainers for faculty or student development (department and college level)

**11. Collaborations with other departments and institutions at the national and international level and their outcome during the past five years**

<b>S. No.</b>	<b>Collaboration with...</b>	<b>Purpose of Collaboration</b>	<b>Outcomes</b>
1	<ul style="list-style-type: none"> <li>• Sona Centre for Non-formal and Vocational Education (another department of Sona College)</li> <li>• Steel Authority of India (Salem Steel Plant)</li> <li>• Women Development Corporation (Tamil Nadu State Department)</li> <li>• Tamil Nadu Government (World Bank Project, Poverty Reduction Scheme)</li> </ul>	Training consultancy for customised 35-day 'Sewing Machine Operator Training' for the Garment Industry	<ul style="list-style-type: none"> <li>• 4 MOUs signed</li> <li>• 7 programmes organised</li> <li>• 377 rural women trained</li> <li>• 184 employed in 6-7 garment units in Salem, on an average salary of Rs. 2,500/month</li> </ul>



<b>S. No.</b>	<b>Collaboration with...</b>	<b>Purpose of Collaboration</b>	<b>Outcomes</b>
2	Researchers of other colleges (VMKVC, PSG, KCT, KIT, KSR, SSM, etc)	Research Publications	Seven joint publications
3	<ul style="list-style-type: none"> <li>• Elda Tex Mills, Salem</li> <li>• Sona Vana Textiles, Salem</li> <li>• Thiagarajar Polytechnic College, Salem</li> </ul>	<ul style="list-style-type: none"> <li>• R-and-D Project</li> <li>• R-and-D Project</li> <li>• R-and-D Project</li> </ul>	<ul style="list-style-type: none"> <li>• Project Completed</li> <li>• Ongoing Project</li> <li>• Ongoing Project</li> </ul>

**12. If research is a significant activity, what are the thrust areas of the department**

- Clothing Comfort
- Textile Finishing
- Garment Engineering

**13. Details of the ongoing projects and projects completed during the last five years**

- Clothing Comfort : Ongoing projects – 3; Completed – 1
- Textile Finishing : Ongoing projects – 3; Completed – 1
- Garment Engineering: Ongoing projects – 3; Completed – 1

**14. Publications of the faculty, for the past five years. Details regarding citation index and impact factor**

Journal publications: 23; Conference publications: 20; Total – 43

Journal publications include one journal with Impact Factor of 0.215.

### **15. Participation of the department in the extension activities of the college**

- At least four continuing education courses are organised every year.
- Department regularly takes up at least two industrial training consultancy projects and concurrently contributes to rural development.

### **16. Method of continuous student assessment**

- One-hour test per course on Mondays and Wednesdays; Papers evaluated by Friday; Retest for absentees and below-par students on Saturday afternoons; Weekly test in Maths courses – every Friday, one hour
- Three weekly tests per course per semester
- University pattern model examinations for all theory and lab courses
- Assignments and Motivated Study Projects, at least two per course per semester
- Internal marks: 50% marks; Anna University exams: 50% marks
- Under autonomous system (2010 onwards) internal: external marks 25: 75

### **17. Placement record of the past students and the contribution of the department to the student placements**

- The FT department organises all of its placement activities independently of the college placement cell.
- A pre-scheduled placement training plan is implemented at the departmental level every year.

- The department invites industry experts to train students on factory production techniques through a 10-day programme every year to enhance placement performance.
- 100% placement for the two years, 2009 and 2010
- Average monthly salary of placed students has gone up from Rs 8,000/- in 2009 to nearly Rs 12000/- in 2010.

**18. Significant achievements of the department, faculty or students during the past five years**

**a) University Results:**

- The Fashion Technology Department of Sona College stands first in academic performance among the affiliated colleges under AU-Chennai offering FT programme.

**b) Placement:** As stated above under Point 17.

**c) Student Projects**

- Two student teams secured the second prize (Rs. 50000/-) and a consolation prize (Rs. 10000/-) in 'TechNow 2010', a state-level project work presentation contest at Anna University, Chennai among over 100 participating teams.
- Two patents have been filed, one in each of the areas of spinning and weaving, with faculty guides.

**d) University Ranks**

- 2005-2009 Batch: Three university ranks 1st, 3rd and 6th of only six ranks announced by the university

- 2006-2010 Batch: Five university ranks 1st, 2nd, 3rd, 6th and 7th. The department bagged five of the seven ranks announced by the university.

**e) Student Co-curricular /Extra-curricular Activities**

- Two teams of FT students won the overall championship prize at inter-college technical-events competitions, one held at Anna University, Chennai and the other at Sri Krishna Engineering College, Chennai.
- The FT students have won many prizes in unique sports like swimming and fencing, besides the regular sports events

**f) Strategic Planning**

- The FT Department has been implementing well-documented strategic plans for the periods 2007-2009 and 2009-2012.

**19. Involvement of students in academic/co-curricular and other activities of the department**

(Please provide numbers of students, for the students currently with us)

Students participating in academic activities

- Symposia - ?, Guest Lectures - ?, Workshops - ?, In-plant Training - ?, Industrial Visits - ?, Placement Training - ?, etc

Student participating in co-curricular activities

- Intra-college competitions: Paper Presentation - ?; Poster Presentation - ?; Technical Quiz - ?; Fashion Illustration - ?; FT Students Magazine - ? etc

- Inter-college competitions: Paper Presentation - ?; Poster Presentation - ?; Technical Quiz - ?; Fashion Illustration - ? etc
- Student participating in extra-curricular activities
- Sports and Games - ?; Yoga -?; Cultural Activities - ?, etc

**20. Innovations and best practices initiated/adopted by the departments during the last five years**

- Strategic planning and implementation
- Credit Point System for student soft skills development
- Exclusive Book for Faculty Advisor Counselling Record
- Arrears Clearance Plans
- Institution and Practice of Quality Codes (each staff has a QC booklet)
- Periodic motivational handouts for staff and students
- Two-week and two-month student feedback on teaching-learning process
- Regular workshops for student soft-skills development
- Identification of student and faculty learning styles
- Self-evaluation of faculty using a special format
- Departmental motivational awards for commendable student academic performance and best outgoing students
- Environmental-friendly principles in practise in the department
- Multiple-activity Outreach Centre (Sona-REACH), etc.

## **21. Development and expansion plans of the department for the next 5 years**

- The school's UG programme will go in for **NBA-accreditation** (2010)
- An independent block with **well-equipped laboratories** and **self-sufficient facilities**, including **Conference Room, Seminar Hall, Learning Resources Centre (LRC), Design-Production-cum-Display Centre, R-and-D Centre, Placement Training Centre, Student and Staff Welfare Centre**, etc (2011).
- An international conference in 2012-2013
- Introduction of an MTech programme in 2012-2013
- Establishment of an Industrial Training Centre (2012-2013)
- Enhanced research activities and quality publications (2010-2015)
- Enhancement of interaction with industry (2010-2015)
- Enhancement of continuing education courses (2010-2015)

## **22. Any other highlights**

- The department is recognised as a research centre for PhD by Anna University of Technology - Coimbatore.
- The HOD of the FT Department is an experienced HR Trainer and is involved in several faculty and student training programmes at the college and in AICTE SDPs.

## **C. Evaluative Report of the Department**

### **Department of General Engineering**

#### **(SCIENCE, MATHEMATICS & HUMANITIES AND LANGUAGES)**

The Self-evaluation of every department /submit may be provided in about three pages, avoiding the repetition of data already in the profile to the extent possible. While the profile may provide quantitative data, this part of the report may be more evaluative, using the quantitative data only to substantiate the claims, whenever necessary.

#### **1. Faculty profile, adequacy and competency of faculty**

- 57 faculty: Professors – 6; Assistant Professors - 13 ; Senior Lecturers – 13; Lecturers – 25 Faculty qualifications: Ph.D – 10; Ph.D (Pursing) – 20; Masters Degree – 47
- Faculty strength is adequate as the teacher: student ratio is 57:892

#### **2. Student profile according to programmes of study, gender, region etc.**

- Total student strength – 892 (first year only)
- Male student: Female student ratio is 490:402
- Tamilnadu – 819 students; other states- 3 students; Foreign – 70 students.

#### **3. Changes made in the courses or programmes during the past five years and the contribution of the faculty to those changes**

2005-2006: No changes made

2006-2007 – No changes made

2007-2008 – Anna University of Technology, Coimbatore has signed an MoU with Ebek and the syllabus has been changed into skill oriented one encompassing all the 4 language skills: Listening, Reading, Speaking and Writing.

2009-2010 – Regulations 2008 of Anna University of Technology, Coimbatore is followed.

2010-2011-Autonomous Curriculum is followed.

#### **4. Trend in the success rate and drop out rate of students during the last five years**

- Academic results : 2005-2006 (I year) – 75.08% (I semester), 80.60% (II semester)
- Academic results: 2006-2007 – 66.62% (non-semester)
- Academic results: 2007-2008 – 87.02 (I semester), 82.21% (II semester)
- Academic results: 2008-2009 – 85.66% (I semester), 82.21% (II semester)
- Academic results: 2009-2010 – 78.2% (I semester), 77.0% (II semester)

#### **5. Learning resources of the department like library, computers , laboratories and other such resources**

Physics and Chemistry Laboratory- 49 Equipment

English Language Lab with 75 Lenovo computers, Window 2008, Video Head Projector and one Panasonic VCR



Total No of Library Books- 878, Total no.of Computers in departments- 35 Internet Connections – 35, VHP-1, OHP - 3, Computer Laboratory – 150 computers, Photocopy Machine – 1

#### **6. Enhancement of the learning resources during the past five years**

- Using OHP, VHP
- Addition of more volumes, text books, reference books, CDs, Journals and magazines in both college and department Library.
- Educational Software - Globarena
- Purchase of latest lab equipment, Software in all department lab.
- Addition of more computers with internet facilities for NRI students
- Laptop and Calculator are provided to the students

#### **7. Modern teaching methods in practice other than the lecture method**

- The modern teaching methods currently prevalent are Seminar, Group Discussion, Quiz, Team Teaching, and Demonstration.
- Use of audio visual aids

#### **8. Participation of teachers in academic and personal counseling of the students**

- Special Coaching for vocational group, Tamil medium, and low cut off students
- Counseling for the Students by faculty advisors.
- Conducting Personality Development programme (3programmes) and Orientation Programme (Phase I,II & III) for students
- ‘Improve your English’, classes for Tamil Medium Students

## **9. Details of faculty development programmes and teachers who benefited during the past five years**

Over the last five years (2005-2010), the faculty members benefitted from different development programmes are:

- National Conferences – 30
- International Conferences- 40
- Seminars – 20
- Workshops- 30
- Pedagogical Training Programme- 20

## **10. Participation of teachers in academic activities other than teaching and research**

- Involved as Class Counsellors
- Arranging class committee meetings
- Coordinating Club Activities like Science Club, Aptitude & IQ Club, English Development Club
- Coordinating induction programmes, Seminars, Guest Lectures etc.
- Master of Ceremony
- Coordinating weekly test for I Year B.E/B.Tech students
- Coordinating Bridge Course for I year B.E/B.Tech students and lateral entry students
- Arranging various types of scholarship for the Students
- Compiling / authoring course material for most of the theory courses assigned

- Involved as Coordinator/Joint Coordinator for departmental Learning Resources Centre (Library)
- As resource persons for department's continuing education courses
- As Coordinators for placement training
- As guest lecturers/resource persons invited by other colleges
- As trainers for faculty or student development (department and college level)

**11. Collaborations with other departments and institutions at the national and international level and their outcome during the past five years**

- Our college has signed an MOU with British Council. Our college is also a nodal centre for Business English Certificate (BEC) offered by Cambridge University.
- Our College is identified as the Regional Field Unit of National Testing Service by Central Institute of Indian Languages (CIIL, Ministry of HRD, Government of India), Mysore.
- Chemistry wing has collaboration with Varalakshmi Starch Industries, Salem, SAGOSERVE, Salem, Tamilnadu Starch & Sago Manufactures Association, Salem, Central Tuber Crops Research Institute, Trivandrum, Kerala, Department of Microbial Technology, Madurai Kamaraj University, Department of Chemistry, Anna University, Department of Chemistry, Annamalai University, Anna University (for PhD programmes)
- Physics wing has Collaboration with NARL, Calcutta University, Calcutta, National Data Center, India Meteorological Department,

Pune., Indian Institute of Tropical Meteorology, Pune,. Department of Electronics and communication, Allahabad University, Usikov Institute of Radio Physics, Ukraine , Cyclone Detection Radar Station, Machilipatnam , Nara Institute of Technology, JAPAN Doshisha University, Kyoto, JAPAN , IISc., Bangalore

**12 If research is a significant activity, what are the thrust areas of the department**

- Sonastarch R& D consultancy laboratory
- Centre For Study On Rain Fall And Radio Wave Propagation
- Centre of Photonics and Nanotechnology Laboratory
- Sona Flair (Foreign Language Instruction and Research Centre)

**13 Details of the ongoing projects and projects completed during the last five years**

- Ongoing Project -15
- Tech Teach - An Educational Broadcasting Software & Bio-ethanol from Tapioca starch and solid waste : Completed Project – 2

**14 Publications of the faculty for the past five years. Details regarding citation index and impact factor**

Journal Publications: 53; Conference Publications: 79

Impact Factor : 2.53

**15. Participation of the department in the extension activities of the college.**

- Admission Work

- Consultancy Work in R & D
- ISO Activities
- Club Activities like Science Club, Aptitude & IQ Club, English Development Club etc.,
- Dept Library
- Coordinator for induction programme. Seminar, conference, FDP, symposium.
- Master of ceremony
- PRO in charge
- Anna University Internal Audit Team
- Coordinating weekly test for I Year B.E/B.Tech students
- Coordinator to Bridge Course for I year B.E/B.Tech
- To arrange various type scholarship for the Students

### **Continuing Education Programmes**

- Preparatory Course & Bridge Course
  - Business English Certificate (BEC) Course
  - International English Language Testing Systems (IELTS)
  - Improve your English
  - Advanced Level English for Medical Transcription
  - Foreign Languages
1. German Language course
  2. French Language course

## **16. Method of continuous student assessment**

- Three Weekly Tests per course on Mondays and Tuesdays. Papers evaluated by Thursday.
- University pattern model examinations for all theory and practical papers

## **17. Placement record of the past students and the contribution of the department to the student placements**

Conducting Placement Test, GD, Mock Interview and Oral Presentation for the pre-final year and final year students.

## **18. Significant achievements of the department or faculty during the past five years**

- The recognition permits the recognized supervisors of our department (Dr. K. Karunakaran, & Dr. T. Maruthavan) to function as supervisors for the candidates desirous of registering for research programmes under Anna University.

Dr. K. Karunakaran, and Dr. T. Maruthavanan delivered special lectures in the '6-week – Technology based entrepreneurship development programme on Value added products from tapioca' conducted by ITCOT sponsored by Department of Science and Technology, Govt. of India.

- Dr. Rajasri sen Jaiswal availed visiting fellowship of UGC at S.K. Mitra Centre for Research in Space Environment, Calcutta University, and Calcutta.
- ISTE sponsored one day seminar on “**Aerosols and environmental pollution**” on 30<sup>th</sup> August 2004.
- Faculty Development Programme on “**Material Science**” Sponsored by Anna University organized by Sona College of Technology at Salem on January 3<sup>rd</sup> to 8<sup>th</sup> 2005.
- Orientation Programme for PG teacher on “**+2 Practical Physics**” on 23<sup>rd</sup> & 24<sup>th</sup> September 2005.
- Faculty Development Programme on “**Engineering Chemistry**” Sponsored by Anna University on June 26<sup>th</sup>-July 1<sup>st</sup>, 2006 at Sona College of Technology, Salem.
- ‘**The 3rd International Congress on English Grammar**’ (ICEG 2006) was organised by the Department of Humanities and Languages. Around **310 delegates** from various states of India and across the globe participated in the Congress and **210 papers** were presented. **Resource Persons**-Prof. Ramdas Akela, Prof. Yamuna Kachru, University of Illinois, Urbana, USA, Prof. Priya Hosali, CIEFL, Hyderabad, Prof. P. Ramanujam, Andhra Loyola College, Vijayawada, Prof. Amritavalli, CIEFL, Hyderabad, Prof. V. Prakasam, CIEFL, Hyderabad, Prof. Braj. B. Kachru, University of Illinois, Urbana, USA, Prof. Bill Greaves, York University, Canada, Prof. Christian M.I.M. Matthiessen, Macquarie University, Australia.

- Prof. Paul Tench, Cardiff University, UK. **Grammar and Communication Skills'** was organised by the Department of Humanities and Languages. **Resource Person**-Prof. Paul Tench, Cardiff University, UK.
- **“Sona State Level Science Brilliance (S3B) Test”** Conducted on January 06<sup>th</sup> 2007 at Sona College of Technology. Nearly 200 schools (1000 students) participated in this test.
- First International Symposium on **“Study of rainfall rate and radio wave propagation (ISRR’07)”** sponsored by DST, CSIR, & TNSCST on January 29<sup>th</sup> – 30<sup>th</sup>, 2007 at Sona College of Technology.
- **Ignite India Initiative(3I)** - a motivational programme, was conducted on 28<sup>th</sup> March 2009 for I Year BE/B.Tech students (nearly **750** students)
- SonaStarch R&D centre generated revenue of amount **Rs.85 Lakhs** through testing and consultancy services in the field of applied chemistry
- ‘A State Level Orientation Programme on Computer Aided English Language Lab’ was organized by the Department of Humanities and Languages for the Government School Teachers.
- 9 students have scored **Top Rank among 500 BEC participants** across the country in Business English Certificate course conducted by the **University of Cambridge**. One among them was selected for the final round.
- Sona Rhythms, a Music Show, was organized by the Soft Skills Workshop participants on 20th July 2008 under the Infosys Campus Connect Programme. 6000 & above public participated in the



programme. The Infosys Campus Connect Team has certified the programme as one of the **Best Students Projects**.

- 1 student participated in the “**Talk your way to Japan**” speech contest.
- **15 batches** of Business English Certificate (BEC) course have been conducted and **498 students and 102 staff members** have been trained for the certification by the department
- The Department has promoted Mathematics so successfully that a large fraction of its results are above 90%. The Department has conducted a Mathematical Exhibition 2010 to kindle the interest of the students in Mathematical Sciences.

**19. Involvement of students in academic/co-curricular and other activities of the department.**

- Involvement of students in club activities like Science club, Aptitude & IQ club, English Development Club etc.
- Organizing ‘SONATA’ a Cultural Festival under Fine Arts Club activities

**20. Innovations and best practices initiated/adopted by the departments during the last five years.**

- Using video Clipping from English movies to develop the Spoken English
- Conducting Oral Presentation, Role Play
- Guest lecture on Interpersonal Skills
- Conducting Induction Programmes

**21. Development and expansion plans of the department for the next 5 years**

- To achieve an overall pass percentage of 88%.
- To achieve 96% pass in each theory subject and 100% pass in every practical subject.
- To conduct a series of Motivational / Orientation programmes for the first year B.E/B.Tech students.
- To organize minimum 5 continuing education programmes every year.
- To ensure publication of minimum five research papers in National/International conferences or two papers in journal.
- To obtain minimum two sponsored project from industries/organizations.
- To sign an MOU with other academic bodies.
- To strengthen R & D centres by incubating the ideas.
- To depute the students to reputed institutions and industries for summer internship
- To conduct different club activities for students and faculty
- To Coordinate with AICTE for getting funded projects
- To conduct Guest Lectures on Ethics and Human Values
- To conduct Communication Skills classes for the B.E / B.Tech Students.
- To offer Japanese Language Course.

## 22. Any other highlights

The department of Science (Physics & Chemistry), Humanities and Languages and Mathematics is recognized as a research centre for Ph.D by Anna University of Technology, Coimbatore. The recognition permits the recognized supervisors of our departments (Dr. K. Karunakaran, Dr. T. Maruthavan, Dr. Rajasrisenjaiswal, Dr.S.Saravanan, Dr.M.Renuga and Dr.Ponnuswamy) to function as supervisors for the candidates desirous of registering for research programmes under Anna University.

The HOD of English department has qualified Teaching Knowledge Test offered by Cambridge University in all the three modules **TKT Module 1**, (Language and back ground to Language Learning and Teaching) **Module 2** (Lesson planning and use of resources for language teaching) **Module 3** (Managing the teaching and learning process) The Department of Mathematics offers a complete sustainable training to the various disciplines of Engineering and Technology students at the graduate and post graduate levels. The Department has proven to be valuable by imparting quantitative aptitude training classes for those students going on to campus recruitment

Department of Science started a new centre “**Nanoscience Centre for Optoelectronics and Energy devices (Nano-COED)**” for synthesizing various types of nanomaterials to fabricate future energy devices such as solar cells and light emitting diodes.

**Centre for Photonics and Nanotechnology (PAN)** developed the centre to International Standard for Research and Development in Sona College of Technology. The centre has collaborative research with International researchers in the field of, Quantum dots, MEMS, Nonmaterial, Solar Technology, Crystal growth for NLO crystals, OLED and to fabricate semiconductor Micro-tubes, Micro-plates, Micro-mirrors by strain driven self assembling technique for monolithic integration of optical devices and sensors for displays and optical switching and to fabricate Quantum Dot based/Nanoparticles based Solar Cells. Sonastarch developed an economically viable green technology for the extraction of bio-fuel from tapioca tubers/tapioca starch. Centre for study on Rainfall and Radio wave Propagation CRRP has been established in order to create a common platform where researchers of India and abroad will work together in the focused area of rainfall and radio wave propagation, share their knowledge in order to find answers to the unresolved issues in the field. The Centre concentrates on the dynamics of rainfall and associated parameters; natural hazards; the effect of rainfall on radiowave propagation

## C.Evaluative Report of the Department

### Department of Master of Business Administration

#### **1. Faculty profile, adequacy and competency of faculty**

- 23 Full Time faculty: Director – 1; Professors – 2; Assistant Professors – 7; Senior Lecturers – 2; Lecturers – 11  
Faculty qualifications: PhD – 6; Masters Degree – 17
- Faculty strength is adequate and the teacher: student ratio is 1:12
- The faculty are competent teachers, trained formally in pedagogy, and consistently produce 100% or nearly 100% results in the courses they teach. Faculty are involved in consultancy, training and research.

#### **2. Student profile according to programmes of study, gender, region, etc**

- Two year MBA Full Time programme is offered
- Doctoral Programme (Ph.D Part time) is offered
- Total student strength – 295 students (first year to final year)
- 9 research scholars have been registered for Ph.D
- Male student: Female student ratio is about 1.12:1 (156: 139)
- Total current student strength (excluding first year): 127

Tamilnadu – 115 students; Kerala – 1; AndhraPradesh – 1

Bihar – 1; Foreign – 9

#### **3. Changes made in the courses or programmes during the past five years and the contribution of the faculty to those changes**

Each department may provide information as follows:

2005-2006: Regulations 2004 of AU-Chennai

2006-2007: Regulations 2004 of AU-Chennai – No changes made

2007-2008: Regulations 2007 of AUT-Coimbatore

2008-2009: Regulations 2007 of AUT- Coimbatore

2009-2010: Regulations 2009 of AUT – Coimbatore

**4. Trend in the success rate and drop out rate of students during the last five years**

- 10 batches have been graduated
- Academic Results:
  - 2005-2007 batch – 80.00% Pass
  - 2006-2008 batch – 96.09% Pass
  - 2007-2009 batch – 97.41% Pass
  - 2008-2010 batch – 98.35% Pass
- The drop out rate is negligible.

**5. Learning resources of the department like library, computers, laboratories and other such resources**

- MBA department has a separate Library and resources available are
  - No. of Books – 11847 + 500 books in MBA Director's Cabin
  - No. of Titles – 4644;
  - Journal Subscribed (National & International) – 85 nos.
  - Management related CDs – 284 no.s
  - Online Databases available in our Library

- IEL Online, ASME Digital, ACM Digital Library, Prowess Database, NPTL course
- Television with DVD Player
- Computer Laboratory: 101 computers with Internet connectivity.
- Since 2008 WIFI Connection is available in the department.
- 29 Laptops; Printer Dot Matrix – 4 nos.; LaserJet – 4nos are available in the department.
- Teaching aids: 7 VHPs and 6 computer systems for classroom session.

#### **6. Enhancement of the learning resources during the past five years.**

- There has been an increase in the number of learning resources in the past five years, from 5269 books in 2006 to 11847 in 2010.

#### **7. Modern teaching methods in practice other than the lecture method**

- The modern teaching methods currently prevalent are
  - Case Analysis
  - Role Play
  - Factory Visits
  - Field Visits
  - Co-operative Learning
  - Management Games
  - Activity / Action Based Learning
  - Video Documentaries

## **8. Participation of teachers in academic and personal counselling of students**

- The students are divided into groups of around 10 each and assigned to the faculty such that every faculty acts as a 'Faculty Advisor'(FAs) for a specific group of students.
- There is a counselling hour every week, such that every student is counselled once a fortnight on academic or personal matters.
- The FAs maintain all counselling records in files.

## **9. Details of faculty development programmes and teachers who benefited during the past five years**

Over the last five years (2005-2010), the total number of faculty who have benefitted from different development programmes are as listed below:

- National Conferences – 10
- International Conferences – 14
- Technical Seminars – 22
- Workshops – 29
- Pedagogical Training – 13

## **10. Participation of teachers in academic activities other than teaching and research**

- Strategic planning and implementation – every faculty is specialising in a thrust area for thrust areas identified for departmental development / faculty development.



- Involved as Class Counsellors (to regularly liaise with and keep day-to-day records of a designated class of students) and as Faculty Advisors (for counselling of an assigned group of students)
- Compiling / authoring course material including cases for most of the theory courses assigned.
- Organising industrial visits for students and accompanying them during visits
- Organising conferences, seminars, guest lectures, student symposia, SDPs, student internships, etc
- Involved as Coordinator/Joint Coordinator for departmental Learning Resources Centre (Library)
- As resource persons for department's continuing education courses
- As Coordinators for placement training and organising on-site or off-site interviews for student placement
- Visiting industry periodically to enhance industry-academia interaction
- As guest lecturers/resource persons invited by other colleges
- As trainers for faculty or student development (department and college level)

**11. Collaborations with other departments and institutions at the national and international level and their outcome during the past five years**

<b>S. No.</b>	<b>Collaboration with...</b>	<b>Purpose of Collaboration</b>
1	Green Land Farm, Salem	Innovative project – Design and Fabrication of SOKA machine
2	KMC Constructions Ltd, Hyderabad	Provide Training & Consultancy for KMC.

<b>S. No.</b>	<b>Collaboration with...</b>	<b>Purpose of Collaboration</b>
3	National Innovation Foundation, Ahmedabad	Providing Innovative projects for Students
4	Researchers of other colleges (KPR, Alliance B School, AMS, Gobi Arts, Periyar University)	Publish research articles in National and International Journals.
5	Royal Government of Bhutan	Offered Diploma Courses in Management
6	Assumption University of Thailand, Bangkok	<ul style="list-style-type: none"> <li>• Faculty and Student Exchange</li> <li>• Research</li> </ul>

**12. If research is a significant activity, what are the thrust areas of the department**

- Rural Development – UGC’s Special Assistance Programme – Proposal submitted.
- Human Resources
- Entrepreneurial Development

**13. Details of the ongoing projects and projects completed during the last five years**

**Ongoing Projects**

- Short Term courses based on Modular Employable Skills (MES) in Retail Sector in collaboration with Directorate General of Employment and Training, Ministry of Labour and Employment, Government of India.

## **Projects Completed**

- Prem Textiles International, Karur – to implement customized ERP based on BPR, Development of Admin Systems
- Godrej Home Appliances Division – Training programme for Sales personnel.
- Royal Government of Bhutan - Training programs under GOI project for HRD of private Sector (Diploma in Marketing Management and Strategic Leadership for Schools in Changing Environment)
- KMC Constructions Ltd, Hyderabad – Training & Consultancy for KMC constructions
- AKR Parcel Services, Salem - to provide consultancy support to AKR (Productivity of HR in order to attain higher and faster growth)
- Southern India Mills Association (SIMA)
- Vee Technologies Pvt ltd., - Conduct promotion test for team leaders.
- One Patent Filed - Design and Development of MOTIF(BUTTA) Construction Mechanism for Handloom project under the guidance of Ms. S.P. Thenmozhi and Mr. C. Prakash.

## **14. Publications of the faculty, for the past five years. Details regarding citation index and impact factor**

No. of Book Publication: International : 1 National: 5

No. of publication in National and International Journal: 85

### **15. Participation of the department in the extension activities of the college**

- At least four continuing education courses are organised every year.
- Department regularly takes up at least two industrial training and consultancy projects and concurrently contributes to rural development.

### **16. Method of Continuous Student Assessment**

- Two Internal Assessment Test per semester; Retest for absentees and failed students.
- University Pattern Model examinations for all theory and lab courses.
- Assignments at least one per course per semester.
- For II yrs MBA students, Internal marks: 50% marks; Anna University exams: 50% marks
- For I yr MBA students, Under Autonomous System: Internal – 60 marks  
External – 40 marks

### **17. Placement record of the past students and the contribution of the department to the student placements**

- Department of Management Studies organises its placement activities independently.
- A pre-scheduled placement training is carried out every year
- Industry experts are invited to deliver Guest Lectures.
- 83% placement for the year 2008-2009 and 71% placement for the year 2009-2010
- Average salary package is Rs. 2.25 lakhs per annum

**18. Significant achievements of the department, faculty or students during the past five years**

**a) University Ranks**

- 2005-2007 – A. Mythili and Swathi Elangovan has secured 41<sup>st</sup> and 46<sup>th</sup> Rank in Anna University Examination.

**b) Student Association Activities**

- Inaugurated many Club activities in various specialisation like HR, Marketing, Production etc.
- Cyber Journey of Sona e-Mag, where its main objectives is to disseminate new knowledge in the field of management to the corporate and academia in a short and simple manner.

**c) Student Driven Activities**

- Dhriti (Determined to Excel) – State Level Management Fest organised by our students.
- B3 (Business Brain Busters) – National Level Management Quiz.

**d) Student Projects:**

Research project done by II year MBA students under the guidance of Ms. S.P. Thenmozhi, Assistant Professor for National Innovation Foundation, Ahmedabad India during March 2009

- Feasibility study of Reversible Reduction for Marine Inboard Engine
- A Market Study on Ceiling cooler in the District of Salem, Erode and Namakkal

- A Market Study on Sugarcane bud chipper in the District of Salem, Erode and Namakkal.

**e) Student Co-curricular /Extra-curricular Activities**

- MBA students won the overall championship prize in the National level and State level Inter-College Management Meet.
- Besides the regular sports events, our students have participated in various sports events like Basket ball; Power lifting, etc.

**f) Training and Development**

- For the development of industrial executives and the faculty, Training and Development centre organised 30 Management Development Programmes, 6 workshops, 6 Faculty Development programmes, 3 seminars and 1 Conference

**g) Consultancy**

- Training and Consultancy for KMC Constructions Ltd, Hyderabad (Revenue Generated:48.58 lakhs)

**h) Journal Publication**

- Global Management Review Journal launched in the year November 2006.

**i) Social Responsibility**

- Manage Mentor – more than 30 Live programmes telecasted by our faculty members with the aim to create Management Awareness among the Public

**19. Involvement of students in academic/co-curricular and other activities of the department**

(Please provide numbers of students, for the students currently with us)

All the Students are participating in academic activities like Symposium, Guest Lectures, Workshops, In-plant Training, Industrial Visits, Placement Training etc

**Student participating in co-curricular activities**

- Intra-college competitions: Best Manager: 3; Paper Presentation: 3, Business Quiz: 3, HR Event – 2; IT Event: 1; Business Plan: 1; Finance Event: 2;

**Student participating in extra-curricular activities**

- Sports and Games – 3

**20. Innovations and best practices initiated/adopted by the departments during the last five years**

- Case Study Method
- Short term Corporate Certified Programmes
- Student driven events and Student placement activities
- Students involvement in institutional activities/operations
- Institution and Practice of Quality Codes (each staff has a QC booklet)
- Periodic motivational handouts for staff and students
- Two-week and two-month student feedback on teaching-learning process
- Regular workshops for student soft-skills development

- Identification of student and faculty learning styles
- Self-evaluation of faculty using a special format

## **21. Development and expansion plans of the department for the next 5 years**

- An independent block with **well-equipped laboratories** and **self-sufficient facilities**, including **Conference Room, Seminar Hall, Learning Resources Centre (LRC), Design-Production-cum-Display Centre, R-and-D Centre, Placement Training Centre, Student and Staff Welfare Centre**, etc (2011).
- Every year conduct a National and International conference
- Enhanced research activities and quality publications
- Launch series of MDPs and FDPs
- Enhancement of interaction with industry (2010-2015)
- Enhancement of continuing education courses (2010-2015)

## **22. Any other highlights**

- Director has delivered over 75 MDPs, and taken up over 40 consulting projects with MNCs and national companies.
- The department is recognised as a research centre for PhD by Anna University of Technology - Coimbatore.
- Director and other faculty members are experienced Trainers and have involved in several faculty and student training programmes at the college and in AICTE Seminars.



## C.Evaluative Report of the Department

### Department of Master of Computer Applications

#### 1. Faculty profile, adequacy and competency of faculty

<b>Faculty Details</b>	<b>Required</b>	<b>Available</b>	<b>Ph.D</b>	<b>Ph.d (pursuing)</b>	<b>MCA</b>
Teaching Faculty	24+1 Director	24+1 Director	3	13	9

- Director – 1, Professors – 3, Assistant Professors – 5, Lecturers – 16
- Faculty strength is adequate for the student ration as 1:15
- Faculties are competent as they are trained by various training programmes

#### 2. Student profile according to programmes of study, gender, region etc

<b>MCA</b>	<b>Gender</b>		<b>Region</b>			<b>Total</b>
	<b>Boys</b>	<b>Girls</b>	<b>TamilNadu</b>	<b>Other State</b>	<b>Foreign</b>	
I Year	69	49	118	-	-	118
II Year	65	55	120	-	2	120
III Year	62	54	116	-	-	116

**3. Changes made in the courses or programmes during the past five years and the contribution of faculty to those changes**

- 2002 – 2005: Regulations of AU-Chennai (No Changes Made)
- 2003 – 2006: Regulations of AU-Chennai (No Changes Made)
- 2004 – 2007: Regulations of AU-Chennai (No Changes Made)
- 2005 – 2008: Regulations of AU-Chennai (No Changes Made)
- 2006 – 2009: Regulations of AU-Chennai (No Changes Made)
- 2007 – 2010: Regulations of AUT-Coimbatore (Changes Made)
- 2008 – 2011: Regulations of AUT-Coimbatore (No Changes Made)
- 2009 – 2012: Regulations of AUT-Coimbatore (No Changes Made)
- 2010 – 2013: Autonomous Curriculum (Changes Made in second semester)

The faculties are contributed in the way of giving technical ideas and inserting new subjects on research and placement related areas.

We have Board of Studies with industry people who are highly experienced in giving suggestion on new subjects which help the students to implement the concepts on the real time applications.

**4. Trends in the success rate and drop out rate of students during the last five years**

<b>Batch</b>	<b>No. of Students Admitted</b>	<b>Success Rate</b>	<b>Drop out Rate</b>
2003-06	60	100%	Nil
2004-07	60	100%	Nil
2005-08	60	100%	0.02 %
2006-09	60	100%	0.02 %
2007-10	60	100 %	0.02 %

**5. Learning Resources of the department like Library, Computers,**

**Laboratories and other resources**

<b>Library</b>	
<b>Item</b>	<b>Quantity</b>
Total No. of Books	8964
No. of Titles	2566
Journals	National:24,International:24
Tutorial CDs, DVDs	2255
TV with DVD player	1
Computer with Internet	5
<b>E-resources in Library</b>	
Online Journal	IEL,ACM
AV resources	NPTEL resources
Databases	CMIE Prowess
<b>Computer Lab</b>	
<b>Equipment</b>	<b>Quantity</b>
No. of Labs	3
No. of Computers	184
Internet Connection	184
Printer Dot Matrix	18
Printer Laser	2
<b>Other resources</b>	
<b>Item</b>	<b>Quantity</b>
VHP	6
OHP	2
Laptop	7
White Board	8

## **6. Enhancement of learning resources during the past five years**

- E-Learning
- Social Networking learning
- Separate department library with 9000 text books, journals, magazines, etc..

## **7. Modern teaching methods in practice other than the lecture method**

- Presentation
- Team Teaching
- Seminar
- Group Discussion
- Quiz
- Activity Based Learning
- Demonstration
- Project Work
- Innovative Works
- Group Activity

## **8. Participation of teachers in academic and personal counseling of students**

- Active participant in Academic results like weekly test, model exam and intensive coaching
- Personal counseling for Body Language, Personality Development & Soft skills
- Counseling in matters of Personal problems
- 12 to 15 students allotted for each faculty to improve the progress of students under all status
- Two faculties will be allotted as class counselors for each class
- Two class committee meeting will be conducted for each semester
- Two to three faculty advisor meeting will be conducted for each semester

**9. Details of Faculty Development Programmes and teachers who benefited during past five years**

Programmes attended by faculty	Year				
	2005-06	2006-07	2007-08	2008-09	2009-10
National Conference	13	06	02	17	21
International Conference	05	02	01	06	06
Workshops/ Seminars	27	02	07	20	29
FDP	11	00	03	09	12

**10. Participation of teachers in academic activities other than teaching and research**

- Representing at National and International Conference
- Question Paper setting
- Involved as class counselors and faculty advisors to improve the progress of students
- Organizing conferences, seminars, guest lectures, SDP, symposium
- Involved as coordinators for placement training, value add-on course training, personality development programs
- Course materials are authored by faculties for most of the theory courses and laboratory courses

- Invited as a resource persons for national symposiums, conferences, SDP, workshops, seminars on various reputed engineering colleges
- Faculties are invited as guest lecturers by other colleges

**11. Collaboration with other department and institutions at the national and international level and their outcome during the past five years**

<b>Collaboration with</b>	<b>Purpose of Collaboration</b>	<b>Outcomes</b>
Tamilnadu Government & PHC (Primary Health Centre)	Training on computer fundamentals for rural area women's (Duration:3-4 months)	Trained candidates are employed as Data Entry Operators in BPO companies
	Training on computer fundamentals, Internet for <b>Primary Health Centre (PHC)</b> (Duration-20 days)	Employees are trained well to work in computers
	Training on computer fundamentals, Internet for employees of registrar office	Employees are trained well to work in computers

**12. If research is a significant activity, what are the thrust areas of the department**

- Steg Bio Metric
- Network Security
- Adhoc Networks
- Image Processing

**13. Details of ongoing projects and projects completed during the last five years**

<b>Projects Completed</b>		<b>Projects Ongoing</b>	
<b>List</b>	<b>Nos</b>	<b>List</b>	<b>Nos</b>
<ul style="list-style-type: none"> <li>• Student Information System</li> <li>• Examination process control system</li> <li>• Fees follow-up system</li> <li>• Income tax filing</li> <li>• Online hall reservation</li> </ul>	23	<ul style="list-style-type: none"> <li>• Automation s/w for TPT</li> <li>• Autonomous process for Exam cell</li> <li>• Staff Information System</li> <li>• Hospital Management</li> </ul>	4
<b>Product Development</b>			
<ul style="list-style-type: none"> <li>• Integrated milk procurement system (IMPS)</li> <li>• Examination Process Control System for Polytechnic colleges</li> <li>• Online Quiz</li> <li>• SMS Based performance Access System</li> <li>• Online university results retrieval process</li> </ul>			

**14. Publications of the faculty for the past five years. Details regarding citation index and impact factor**

- Journal Publication: 22
- National Conference Publications: 58
- International Conference Publications: 20
- Citation Index: Artificial intelligence in medical processing, Applied soft computing (Impact factor-2.468), Knowledge based systems (Impact factor-1.406), Applied mathematics and computation (Impact factor-1.236)

- Average Impact Factor: 1.70

### **15. Participation of department in the extension activities of the College**

- Maintenance of Management Information System for the entire college for students and staff
- Online Exam System for Placement cell

### **16. Method of continuous student assessment:**

- Counseling
- Four Weekly test, Two Model exam, one intensive coaching – per semester
- Retest for below average students will be conducted on every Saturday
- Seminar
- Group activity
- Club activity
- Motivational and Innovative works for self improvement of knowledge

### **17. Placement record for the past students and the contribution of the department to the student placements**

<b>Batch</b>	<b>Total No. of Eligible Students</b>	<b>No. of Students Placed</b>	<b>Percentage of Placement</b>
2005-2008	56	33	56%
2006-2009	59	47	80%
2007-2010	57	37	65%



## Contribution of the Department to the student Placements

- Conducting GD
- Conducting Continuous Education Programmes on Technical Subjects
- Online assessment Test
- Placement tips by External Faculties/Corporate peoples.
- Industry Interaction Programme
- Mock Interview
- Personality Development Programme

### 18. Significant Achievement of the department, faculty and Students during the past five years

#### a) University Ranks:

Category	2003-06	2004-07	2005-08	2006-09	2007-10
University Rank Holders	2	1	7	1	Result awaited

b) **University Results:** consecutively secured first position in AUT-coimbatore results from 2007 onwards

c) **Placement:** Produced 56% of placement in 2005-08 batch, 80% of placement in 2006-09 batch and 65% of placement in 2007-10 batch

Every year our students achieved overall trophy in national symposium conducted by reputed engineering colleges

**19. Involvement of Students in Academic/ Co-Curricular and other activities of the department**

- Participated in different events of Inter College symposium and won 10 Overall trophies
- Vibrant Participated in different field of sports like athletic, Power – Lifting, High Jump, Ball-Bad mitten, 4 x 40 M Relay, and won prizes at zonal and Inter zonal level.

**20. Innovation and best Practices initiated / adopted by the department during last five years**

- **R&D Supports**
- Psychological, career counseling
- Flexibility in electives
- Industry based assignment
- Continuing Education Programme
- Organizing training workshop
- Classroom ambience
- Personality development Programmes
- Exclusive evaluation report for students
- Student feedback on teaching / learning process

**21. Development and expansion plans of the department for the next five years**

- Planning to conduct international conference
- To have more continuing education courses for students and rural area peoples

- New block with exclusive facilities (55,000 sq m)
- Steps taken to achieve 100% of placement in every batch
- Strengthening on more research activities in centre of excellence

## **22. Any other highlights**

- The department is recognized as research centre for PhD by AUT – Coimbatore
- The department is accredited by NBA
- Every year our department conducting AICTE sponsored training programmes, DIT sponsored seminar, ISTE sponsored programmes, National Conferences and National symposium
- Achieved 60% to 80% of placement in every batch and students are placed in Various IT industry and Banking Sectors
- 10% of alumnus has turned as Entrepreneurs
- Training program on “computer fundamentals” for rural women sponsored by Tamilnadu women’s development corporation, Govt of Tamilnadu
- Training program on “computer fundamentals and Internet” for employees of Primary Health Centre(PHC) sponsored by Unicef and Govt of Tamilnadu
- Add-on-course functioning for all MCA students on various domain areas

### **D. Declaration by the Head of the Institution**

I certify that 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:**

Place:

Date:

## Conferment of 2 (f) Status by UGC

Ph. 23236351, 23232701, 23237721  
23234116, 23235733, 23232317  
23236735, 23239437, 23239627  
UGC Website: www.ugc.ac.in



Copy to Mr. Manoj Kumar  
UGC Accounts  
विश्वविद्यालय अनुदान आयोग  
बहादुरशाह जफर मार्ग  
नई दिल्ली-110 002  
UNIVERSITY GRANTS COMMISSION  
BAHADURSHAH ZAFAR MARG  
NEW DELHI-110 002

F. No. 8-95/2009 (CPP-I)

June, 2009

The Registrar,  
Anna University  
Coimbatore



Sub:- List of Colleges prepared under Section 2 (f) of the UGC Act, 1956-inclusion of New College-

Sir,

I am directed to refer to the letter no. SCT/2 (f) & 12 (B) 1520/2009 dated 02.04.2009 received from the Principal, Sona College of Technology, Thiagarajar Polytechnic Road, Salem, (T.N) on the subject cited above and to say that the name of the following College has been included in the list of Colleges prepared under Section 2 (f) of the UGC Act, 1956 under the head Non-Government Colleges teaching upto Post Graduate Degree:-

Name of the College	Year of Establishment	Remarks
Sona College of Technology, Thiagarajar Polytechnic Road, Salem - 636 005. (T.N)  (On permanent affiliation)	1997	The College is <u>not</u> eligible to receive Central assistance under Section 12 (B) of the UGC Act, 1956 as the UGC has not yet finalised the details to provide financial assistance to "Self Financed Colleges".

The Indemnity Bond and other supporting documents submitted in respect of the above College have been accepted by the Commission.

Yours faithfully

(S. C. Chadha)  
Deputy Secretary

Copy to:-

- 1 The Principal, Sona College of Technology, Thiagarajar Polytechnic Road, Salem - 636 005, Tamil Nadu
- 2 The Secretary, Government of India, Ministry of Human Resource Development, Department of Higher Education, Shastri Bhawan, New Delhi-110 001.
- 3 The Secretary to the Government of Tamil Nadu, Department of Higher Education, Chennai (Tamil Nadu).
- 4 The Joint Secretary, UGC, South Eastern Regional Office, P.B. No. 152, A.P.S.F.C. Building, IV Floor, 5-9-194, Chirag Ali Lane, Hyderabad-500 001 (A.P).
- 5 Publication Officer, UGC-Website, New Delhi.
- 6 Section Officer, FD-III Section, UGC, New Delhi.
- 7 All Sections, UGC, New Delhi.
- 8 Guard file.

(Sunita Gulati)  
Section Officer

## Conferment of 12 (B) Status by UGC

Ph. 23236351, 23232701, 23237721  
23234116, 23235733, 23232317  
23236735, 23239437, 23239627

Extension No. 413 (CPP-I Colleges)  
UGC Website: [www.ugc.ac.in](http://www.ugc.ac.in)  
F. No. 8-95/2009 (CPP-I/C)

The Registrar,  
Anna University,  
Tirunelveli – 627 007,  
Tamil Nadu.



SPEED POST



August, 2010

27 AUG 2010

*Secretary UGC*  
Secretary UGC  
विश्वविद्यालय अनुदान आयोग  
बहादुरशाह जफर मार्ग  
नई दिल्ली-110 002  
UNIVERSITY GRANTS COMMISSION  
BAHADURSHAH ZAFAR MARG  
NEW DELHI-110 002

Sub: - Declaring a College fit to receive Central Assistance under Section 12 (B) of the UGC Act, 1956.

Sir,

I am directed to refer to the letter No. SCT/12(B) Application/1791/2009 dated 09.12.2009 received from the Principal, Sona College of Technology, Thiagarajar Polytechnic Road, Salem – 636 005, (Tamil Nadu) on the above subject and to say that it is noted that the following college is un-aided/self financed and permanently affiliated to Anna University. I am further to say that the name of the following college has been included in the list of colleges prepared under Section 12 (B) of the UGC Act, 1956 under the head 'Non Government Colleges teaching upto Master's Degree':-

Name of the College	Year of Establishment	Remarks
Sona College of Technology, Thiagarajar Polytechnic Road, Salem – 636 005, (Tamil Nadu).	1997	The college is already included under Section 2 (f) of the UGC Act, 1956 vide this office letter No. F. 8-95/2009 (CPP-I) dated 25.06.2009. The college is now declared fit to receive Central Government grants from other sources, even if it does not receive grants from UGC due to paucity of funds as decided by the Commission at its meeting held on 4 <sup>th</sup> May, 2010.

The documents submitted in respect of the above College have been accepted by the University Grants Commission.

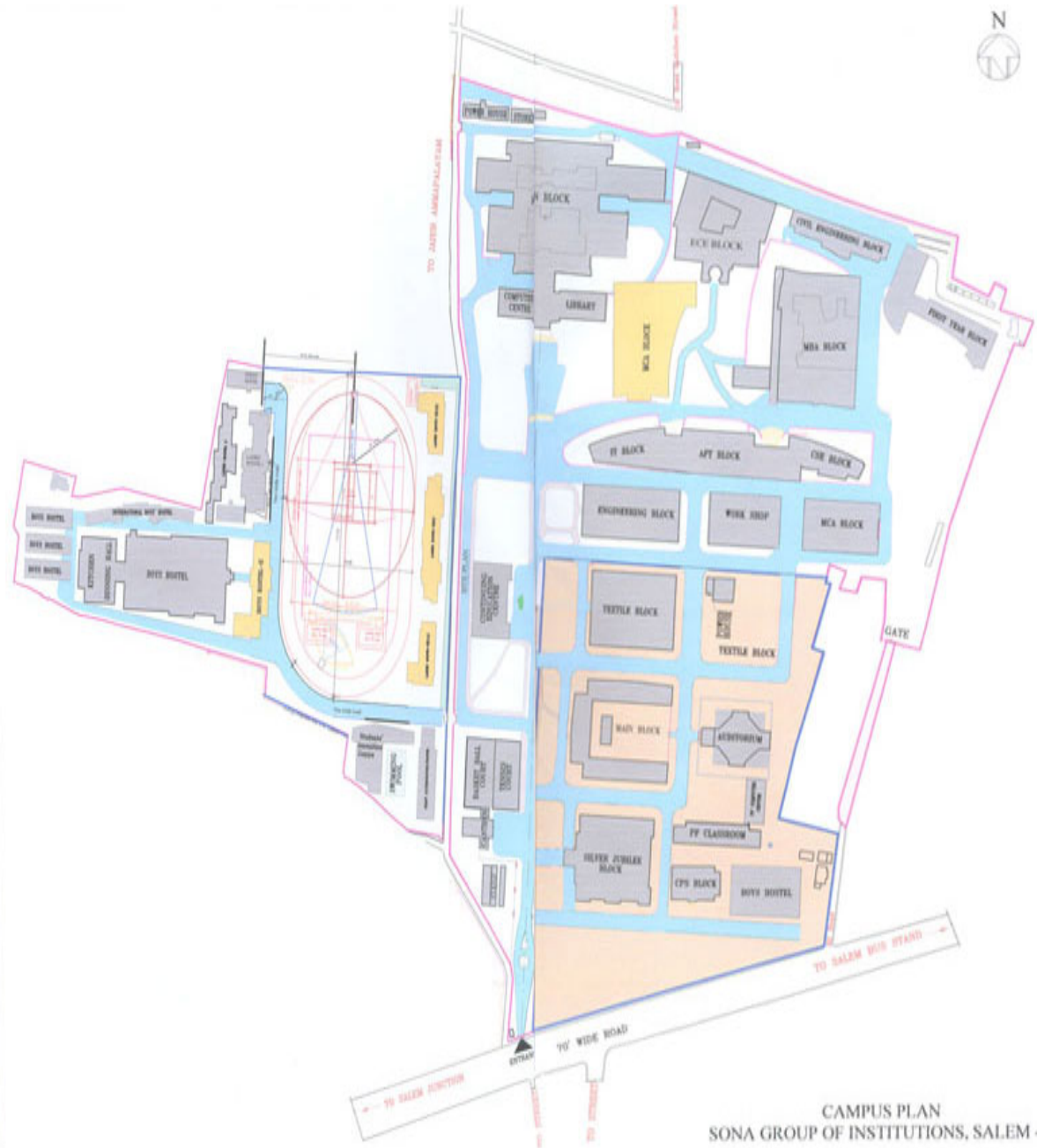
Yours faithfully,

(S.C. Chadha)  
Deputy Secretary

Copy to:-

1. The Principal, Sona College of Technology, Thiagarajar Polytechnic Road, Salem – 636 005, (Tamil Nadu).
2. The Secretary, Government of India, Ministry of Human Resource Development, Department of Higher Education, Shastri Bhawan, New Delhi - 110 001.
3. The Secretary, Higher Education Deptt., Government of Tamilnadu, Secretariat, Chennai – 600 009, (Tamil Nadu).
4. The Joint Secretary, UGC, South Eastern Regional Office (SERO), P.B. No. 152, A.P.S.F.C. Building, IV Floor, 5-9-194, Chirag Ali Lane, Hyderabad – 500 001, (Andhra Pradesh).
5. Publication Officer, UGC-Website, New Delhi.
6. Section Officer, FD-III Section, UGC, New Delhi.
7. All Sections, UGC, New Delhi.
8. Guard file.

*Sunita Gulati*  
(Sunita Gulati)  
Section Officer



CAMPUS PLAN  
SONA GROUP OF INSTITUTIONS, SALEM -

# COURSES OFFERED

## BE/BTech Degrees (Full time-4 Years)

### BE

- Mechanical Engineering
- Electrical and Electronics Engineering
- Computer Science and Engineering
- Electronics and Communication Engineering
- Civil Engineering

### BTech

- Information Technology
- Fashion Technology

## MASTERS DEGREES

### ME (Full time-2 Years)

- Computer Science and Engineering
- Software Engineering
- Communication Systems
- VLSI Design
- Power Systems Engineering
- Power Electronics and Drives
- Product Design and Development
- Engineering Design

**MBA** Master of Business Administration

**MCA** Master of Computer Applications

## DOCTORAL DEGREE (PhD)

- MECH
- EEE
- ECE
- CSE
- FT
- Physics
- Chemistry
- Mathematics
- Management Studies
- Computer Applications
- English
- Civil

A-11





question  
6-4-10

Anna university Audit Report  
not available with me  
29/07/10  
All

### BAR 1 - Audit Report for Upgrade

Company Name/Code	SONA COLLEGE OF TECHNOLOGY	5161.35
Job Description/Code:	Re-Certification	676535

Certification Audit	Re-certification Audit	Surveillance	2nd Annual
---------------------	------------------------	--------------	------------

Standard audit conducted against : ISO 9001:2008	Other documents :
---	-------------------

Audit Date	22/07/2010	23/07/2010
Audit Date (Main : EMS or OHSAS)		

Team Leader : Ravishankar Pingalay	Team Member(s) : M Saravanan
---------------------------------------	---------------------------------

Scope of Audit (local language):	IMPARTING EDUCATION IN THE FIELDS OF ENGINEERING, TECHNOLOGY, MANAGEMENT AND APPLIED SCIENCES LEADING TO GRADUATE AND POST GRADUATE DEGREES AND TO SUPPORT THE INDUSTRIES BY PROVIDING CONSULTANCY, TESTING, RESEARCH AND HUMAN RESOURCES
----------------------------------	---

Scope of Audit (in English) :	IMPARTING EDUCATION IN THE FIELDS OF ENGINEERING, TECHNOLOGY, MANAGEMENT AND APPLIED SCIENCES LEADING TO GRADUATE AND POST GRADUATE DEGREES AND TO SUPPORT THE INDUSTRIES BY PROVIDING CONSULTANCY, TESTING, RESEARCH AND HUMAN RESOURCES
-------------------------------	---

Has the certificate details changed from the current certificate ?	Yes
Date of next visit	- Re certification Before 2nd week July 2011

Audit Report Distribution :
SONA COLLEGE OF TECHNOLOGY BY INDIA

#### CERTIFICATE DETAILS :

Site(s) Address(es) :
SALEM - SONA NAGAR, THIAGARAJAR POLYTECHNIC ROAD - 636 005 SALEM - TAMILNADU - INDIA

Accreditation(s)	Language
*UNITED KINGDOM - United Kingdom Accreditation Service	ENGLISH

TEAM LEADER RECOMMENDATION :			
All NCR's now cleared :	Yes	Proceed to / Continue Certification	Yes
Approved By :	C.Ravishankar Pingalay	Date :	26-07-2010



29/07/10

### BAR2 - Audit Summary

Company Name/Code :	SONA COLLEGE OF TECHNOLOGY	5161.35
Job Description/Code:	Re-Certification	676535

Date(s) :	22/07/2010	Department(s) / Process(es)	
Contact(s) :		1	Civil Engineering
Ponnusamy Dr. S.	Murugan C.	2	Computer Science Engineering
S.K SANMUGASEKAR	Prasad Babu Mr.	3	Electronics and communications Engineering
Gopi B	Sathyabama B	4	Library
		5	Management Representative
		6	Mathematics

		Ma nRe v	1	2	3	4	5	6						
Team Leader :	Ravishankar Pingalay	X				X	X	X						
Team member(s) :	M Saravanan	X	X	X	X									

Site(s) :														
SALEM		X	X	X	X	X	X	X						

	ISO 9001:2008 - Clauses :													
4.1	General Requirements	X	X	X	X	X	X	X						
4.2	Documentation Requirements	X	X	X	X	X	X	X						
5.1	Management Commitment							X						
5.2	Customer Focus			X	X	X	X	X	X					
5.3	Quality Policy							X						
5.4	Planning							X						
5.5	Responsibility, Authority & Communication		X	X	X	X	X							
5.6	Management Review							X						
6.1	Provision of resources							X						
6.2	Human resources							X						
6.3	Infrastructure							X						
6.4	Work Environment													
7.1	Planning of Product Realization		X	X	X	X	X	X						
7.2	Customer-related processes		X	X	X	X	X	X						
7.3	Design and Development		X											
7.4	Purchasing													
7.5	Production and Service Provision		X	X	X	X	X	X						
7.6	Control of Monitoring and Measuring Equipments		X	X	X									
8.1	Measurement, analysis and improvement		X	X	X	X		X						
8.2	Monitoring and Measurement		X	X	X	X	X	X						
8.3	Control of non-conforming product		X	X	X	X	X	X						
8.4	Analysis of Data		X	X	X	X	X	X						
8.5	Continual improvement		X	X	X	X	X	X						
BV I	Bureau Veritas Certification - Use of Logo							X						



29/07/10

**BAR2 - Audit Summary**

<b>Company Name/Code :</b>	SONA COLLEGE OF TECHNOLOGY	5161.35
<b>Job Description/Code:</b>	Re-Certification	676535

<b>Date(s) :</b>	23/07/2010	<b>Department(s) / Process(es)</b>	
<b>Contact(s) :</b>		<b>1</b>	Administration
Karunakaran Dr. K.	Saravanan Prof. B.	<b>2</b>	Computer Applications
Amirthalingam S.	Khadar Nawaz GK	<b>3</b>	Continuing Education Centre
Shanthi .	Chetan Bajaj .	<b>4</b>	Information technology
Suresh .		<b>5</b>	MBA
		<b>6</b>	Physical sciences

		<b>Ma nRe v</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>											
<b>Team Leader :</b>	Ravishankar Pingalay	X	X				X	X											
<b>Team member(s) :</b>	M Saravanan	X		X	X	X													

<b>Site(s) :</b>																			
SALEM		X	X	X	X	X	X	X	X										

	<b>ISO 9001:2008 - Clauses :</b>																		
4.1	General Requirements	X	X	X	X	X	X	X	X										
4.2	Documentation Requirements	X	X	X	X	X	X	X	X										
5.1	Management Commitment																		
5.2	Customer Focus			X	X	X	X	X	X										
5.3	Quality Policy																		
5.4	Planning																		
5.5	Responsibility, Authority & Communication																		
5.6	Management Review																		
6.1	Provision of resources																		
6.2	Human resources			X	X	X	X	X	X										
6.3	Infrastructure		X																
6.4	Work Environment			X	X	X	X	X	X										
7.1	Planning of Product Realization			X	X	X	X	X	X										
7.2	Customer-related processes			X	X	X	X	X	X										
7.3	Design and Development	X																	
7.4	Purchasing		X																
7.5	Production and Service Provision			X	X	X	X	X	X										
7.6	Control of Monitoring and Measuring Equipments			X		X			X										
8.1	Measurement, analysis and improvement			X	X	X	X	X	X										
8.2	Monitoring and Measurement			X	X	X	X	X	X										
8.3	Control of non-conforming product			X		X			X										
8.4	Analysis of Data			X	X	X	X	X	X										
8.5	Continual improvement			X	X	X	X	X	X										
BV I	Bureau Veritas Certification - Use of Logo																		



29/07/10

**BAR3 - Audit Findings**

Company Name/Code :	SONA COLLEGE OF TECHNOLOGY	5161.35
Job Description/Code:	Re-Certification	676535
Product Name :	ISO 9001:2008	

**Audit Summary :****Basic inputs:**

The 2nd Surveillance + Up gradation audit as per the requirements of ISO 9001:2008 standard was conducted at "M/S. SONA COLLEGE OF TECHNOLOGY " on 22/07/2010 & 23-07/2010 by 2 auditors for 4 Mandays.

An opening meeting with the audit team was held by the team lead to explain about audit process, audit criteria-ISO 9001:2008, audit methodology, grading of audit findings and results of audit. The scope & exclusions of the Organization remains the same. MR confirmed the audit plan sent and had conducted as per the audit plan.

**Description of the Organization:**

SONA COLLEGE OF TECHNOLOGY, the sister institution of Thiagarajar Polytechnic College, has its inception in the year 1997. The college is affiliated to the Anna University and offers several UG and PG, Engineering, Technology and Management degree programmes. It also offers a whole range of Non-formal, Continuing education courses and programmes through the vibrant Sona Continuing Education Centre. Sona Starch, the chemical laboratory offers the consultancy services, in order to analysis the samples. For eg: the water analysis to find the pH value etc. The Centre's main objective is to invigorate the local economy by providing opportunity for enhancing the employability of the community in the region. This Institution wishes that each of its students has a strong technical base. One of the goals of this college is to emerge as a Centre of Excellence in Research and Development and Development Activities. The various departments of the college have been designed to function individually as specialist research centers. The college also organizes a number of training programmes to mould student's skill sets and to transform them into carrier oriented graduates.

SONA COLLEGE OF TECHNOLOGY is known for its excellence in instructional facilities. Bright and airy classroom, state-of-the-art-laboratories, well equipped workshops, finely stacked library, stupendous sports facilities, feel-at-home -hostel facilities are the highlights of SCT. In addition to this, the students have further advantage of taking advanced / specialized courses through various extension services available within the campus.

**Manual adequacy**

The Quality system manual QM & PM (Process Manual) Version no 03 dated 01/07/10 amended to meet the requirements of ISO 9001:2008 requirements, amendment record evidenced for the revision. Quality manual provides all applicable procedures and includes the scope of the QMS and 7.3 Design & Development is claimed as exclusion. Macro level Sequence of interaction of process was addressed as Macro Process Map under the section -F of QMS. The type and extent of control exercised over outsourced process has been adequately addressed in the manual QM 4.1 and

1) Process Manual (PM) 6-a -Faculty and Staff recruitment, Qualification & Numbers for the Outside/Guest faculty out sourced for covering part /whole of syllabus of MBA. Director of the department have laid down certain norms for their selection and they are evaluated based on student feedback.

2) Process Manual PM-5-C-Assigning contract services at SONA canteen. It is based on the selection and evaluation of canteen service provider, further monitoring by the organization and effectiveness of their functioning is reports to review committee.

Scope of the organization was verified and reconfirmed during this Surveillance + Up gradation audit:  
"IMPARTING EDUCATION IN THE FIELDS OF ENGINEERING, TECHNOLOGY, MANAGEMENT AND APPLIED SCIENCES LEADING

4/8



TO GRADUATE AND POST GRADUATE DEGREES AND TO SUPPORT THE INDUSTRIES BY PROVIDING CONSULTANCY, TESTING, RESEARCH AND HUMAN RESOURCES".

Exclusions Claimed: 7.3: Design and Development

Validation of Scope:

Design: 7.3 –Design and Development – The college does not conceive, Design & develop any course on its own. It is bound by the regulations (NBA & AICTE) of the university, which formulates curriculum and syllabi for all the 17 programmes.

Manufacture : List of courses / programmes offered are list down Sec # D of their QMS.

Supply: Not applicable.

Product Range: List of courses / programmes offered are list down Sec # D of their QMS

Achievement of Policy commitments:

The defined Quality policy is found appropriate to the purpose of the organization. Quality Policy is deployed down to the company through the Quality objectives established for each department.

Details of Process audited:

Comments on Process Performances:

Following Deployment of Quality Objective set for the Departments for the year 2009-2010. Fresh objectives are set for the current academic year, which is to start now.

Departments  
Objectives

Status

1. Civil Engineering	To achieve 65% in university exam	Achieved
	To conduct 95% pass in each subject	Achieved
2. ECE	To achieve 95% pass in final year	98.3% passed
3. CSE	To achieve 90% pass in final year	89.55% Passed
4. IT	To achieve 90% pass in Final year	Even semester - 91.28%, Odd Semester - 71.10%
	To achieve 95% in each subject	7 Subjects Achieved except one
5. MCA	To achieve 90% pass in Final Year	98.31% passed
6. Continuing Education centre	To conduct 30 continuing programmes	Achieved
7. Mathematics	To establish 30 centres of excellence	Achieved.
	To achieve class wise 90% pass	Achieved in odd semesters/Not achieved in Maths III.
8. Physical Science	To achieve overall pass 88%	Achieved 80%.

It was observed that all the departments are monitoring the status of there College level and Department level Objectives. Root cause and corrective action initiated can be further improved. Student's feedbacks are monitored well and actions are taken on the staff deployed. These may be interfaced and improvement in objectives may be monitored on holistically. For other supporting processes measures are monitored during MRM.

Description of system conformance:

Verified the system implementation for the compliance to requirements of Standard and for continual improvement. Remarks as follows.

1. Requirements of standard are well documented and established.
2. Operating teams Involvement; commitment in system implementation and striving for excellence is noted in all the audit processes.
3. Internal auditor training by MR found to be reliable.



29/07/10

4. Integrated Quality & Process manual
5. Statuses of Quality & Department objectives are well monitored.

System strengths

1. Establishment & Deployment of QMS documentation is good.
2. Top management commitment and team effort evidenced.
3. The auditee demonstrated a very positive approach & transparency during the audit.
4. Lesson plan and its execution is well maintained
5. Adherences of Calibrating the lab equipments is well complied.
6. Implementation of MIS across colleges is found effective.

Improvement observed

1. Achieved 4 patents and 36 centers for excellence by the college.
2. Utilization of on line "Autolib" software in Library.
3. Seeking Autonomous and Deemed university status.
4. India's top management magazines have rated well among the India's top engineering institutions.
5. Research work and establishment of lab in the field of Nano technology-tubes & plates.
6. Most of the Objectives are positive in trend.
7. Thirty-six MOUs have been signed with external companies.
8. Campus Placement during last year by the companies has been increased.

Effectiveness of Internal Audit

The internal audit frequency is once in 6 months. Annual Audit plan for the years 2010 evidenced .IA conducted in June & Dec. There are 25 trained Internal auditors deployed. List of IQ auditors as on 06-05-2010 maintained.

Audit schedule and Audit Check list in line with ISO 9001:2008 are maintained for each process /department. Consolidated report of IQA conducted on 10-06-10 & 11-06-10 and observed 2 non-conformities. But there were 4 Observation noted. Consolidated report of IQA conducted on 05-01-10 & 06-01-10 and observed 13 non-conformities. NC report perused, identification of root cause, correction, corrective action taken and closure evidenced. Effectiveness of IQA for the 2 NC's evidenced. Reliability of internal audit is evidenced.

Effectiveness of Management Review

Management Review Committee (MRC) Meeting frequency is once in six months and MRM are conducted at planned interval. Last MRC #15 was conducted on 07.07.2010 at Mech Engg Conference hall, wherein the review of all the inputs and actions initiated are discussed. Reliability of MRM process is evidenced. Class committee meeting & Governing council meeting escalated issues /areas of concerns may be discussed in MRC. Continual Improvements status may be captured in MRC.

Verification of previous non-conformity in Bureau Veritas Certification audit:

There were 3 non-conformities made during last re certification audit and no non-conformity observed during last surveillance audit by Bureau Veritas Certification.

NC Ref

Clause Ref

Details of Non conformance

Verification of Effectiveness

RSO/01

8.2.2

Support activities like Sona Starch and continuing education center were not audited during IQA. IQA conducted on 10th & 11th June 2010 these two departments were audited.

RSO/02

8.5.2

Repeated audit findings evidenced in EEE and CSE dept no analysis and CA taken No NC during their last IQA under this clause requirement.

RSO/03

BV Use of Logo

6/8



29/07/10

The results of various tests conducted in the college laboratories for the external customers are found delivered in the certificate forms consists of BV logo  
MR sent a circular to this effect and also No NC during their last IQA under this clause requirement. Effectiveness correction action verified during this audit, found to be effective and there is no re-occurrence.

Useful comparison with the previous audit findings  
Actions are taken on OFI's identified during last Re certification cycle Audit.

Opportunities for improvement:

- ⊗ Class committee meeting & Governing council meeting escalated issues /areas of concerns may be discussed in MRC. Continual Improvements status may be captured in MRC.
- ⊗ Librarian may further monitor quality of service provided by leased line service provider.
- ⊗ Usage of library by students is presently on an average 5%, action may be taken to improve usage.
- ⊗ Results of Bridge course given for the lateral entry students may reviewed for improvement.
- ⊗ Action taken on Students feedback by all the departments may be further improved.
- ⊗ Evaluation of external faculty may be further strengthened.
- ⊗ Demonstration of effectiveness of action taken by all the HOD's on objectives needs further improvement.
- ⊗ Shelf life of Chemicals used in laboratory can be monitored.
- ⊗ Accessibility of some of the Fire extinguishers may be revisited.
- ⊗ Rubber floor mats near electrical installations at some of the places may be revisited.
- ⊗ Medicines in FA boxes are not maintained properly in some places.
- ⊗ Disposal of UPS batteries and E Waste can be monitored.
- ⊗ Certificates issued in Continuing education can have unique number for better traceability
- ⊗ Adequate lighting at the library may be studied and further light energy savings may be given serious thought.

External communication:

No adverse communication reported within the system. Communications with customers and supplier related to product and process are effectively handled.

Evaluation of compliance to legal requirement:

Verified the compliance as per list of applicable codes and standards shared in Appendix 1.

Uncertainty / obstacles that could affect the reliability of audit conclusions

Generally, the audit flow was good. The audittee and top management were very committed, involved and demonstrated well in their areas during the audit process. The audit feed backs and findings were taken up positively and taken as opportunities for improvement.

No uncertainties / obstacles faced during the audit.

Unresolved diverging opinions between the audit team & audittee

There is no unresolved diverging opinion between the audit team and audittee.

Use of logo

Usage of Logo of Bureau Veritas Certification was once again explained and reiterated during the closing meeting.

Audit Conclusion:

A closing meeting was conducted on 23/07/2010 by the team lead and team consolidated audit findings were communicated/shared. There are no non-conformity noted by the team and areas for improvement pertaining to departments were presented by the team lead. The response of the audittee was positive and top management/Principal assured commitment for improvements.  
Scope & exclusions re confirmed and the validity of certificates to ISO 9001:2008 standards and logo usage were reiterated during the closing meeting.

Agreed follow-up actions

7/8



29/07/10

No Non-conformity recorded during this 2nd Surveillance audit + Up gradation and hence recommendation is made based on the system conformance noted in all the departments.

**System capability**

"M/S. SONA COLLEGE OF TECHNOLOGY " well demonstrates the implementation and maintenance of QMS requirements in all the Departments /Programmes audited. Considering the effective implementation, maintenance of regulatory norms and the confidence levels gauged by the audit team, the organization is recommended for continuance of Certification as per specimen certificate shown and meeting requirements of ISO 9001:2008 standards.

**Auditor Notes**

Auditors maintain their notes as hard copy at office

**Details of Findings :**

OBSERVATION

MAJOR

MINOR

<b>Number of Non Conformities Raised :</b>	<b>Major</b>	0	<b>Minor</b>	0
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**Audit Conclusion :**

The visit report forms part of BV's partnership approach in the audit Management System. The activities audited in Depth are listed in the 'Audit Summary' attached. Any nonconformities identified will require corrective and preventive action, firstly to correct the identified nonconformance and secondly to examine the underlying cause and implement the changes necessary to prevent recurrence. The audit was based on Random samples and therefore nonconformities may exist which have not been identified. If you wish to distribute copies of this report external to the organisation, then all pages must be included.

<b>Team Leader</b>	Ravishankar Pingalay	<b>Company management representative :</b>	S.K SANMUGASEKAR
<b>Client's Acknowledgement</b>	Have all non-conformities been acknowledged by the management representative ?		n/a
<b>Is a Follow-up visit required :</b>	No	<b>Date(s) of Follow-up visit :</b>	
<b>Follow-up visit remarks :</b>			
<b>Persons interviewed :</b>			
<b>Name</b>	<b>Department</b>	<b>Auditor</b>	<b>Date</b>
Dhirajlal A.	Management	M Saravanan	23/07/2010
Dhirajlal A.	Management	Ravishankar Pingalay	23/07/2010



#6  
File

23.04.2010

From

G. Nalla Kumarasamy  
Chief Auditor (803 – Sona College of Technology)  
Associate Professor & Head  
Department of Automobile Engineering  
KSR College of Engineering  
Tiruchengode

To

The Controller of Examinations,  
Anna University – Coimbatore,  
Coimbatore.

Sir,

Sub. : Submission of External Audit Report – Reg.,  
Ref. : Lr No.351(009)/AU-CBE/COE/Audits dated 19.04.2010

As per your direction and guidelines, we have audited all the departments of  
**803 – Sona College of Technology, Salem on 23.04.2010.**

Please find the External Audit Report of the same for your kind perusal and  
reference.

Yours faithfully,

  
Chief Auditor

  
Second Auditor

Copy to:

1. First Copy : The COE, Anna University, Coimbatore
  2. Second Copy : The Principal, 803- Sona College of Technology
  3. Third Copy : The Management, Sona College of Technology
  4. Fourth Copy : The Registrar, Anna University, Coimbatore
- Encl: Attendance Certificate 2 No's along with the Claim Forms

**EXTERNAL AUDIT REPORT**

College Name : 803 – SONA COLLEGE OF TECHNOLOGY, SALEM

Ref. : Instruction issued for the conduct of internal assessment and educative evaluation by Anna University, Coimbatore.  
Vide letter Lr. No.351(009)/AU-CBE/COE/Audits dated 12.04.2010

Subject : External Audit Report

Department Audited : B.E.,/B.TECH., (ALL BRANCHES), ECE-PG, MBA, MCA

Name of the dept. : B.E. MECHANICAL ENGINEERING  
chosen for detailed audit

Date of External Audit: 23.04.2010

Audited by :

G. NALLAKUMARASAMY  
Asso. Professor&Head/Auto  
605 – KSR CE

Chief Auditor

V.K. SENTHIL RAGAVAN  
Asst. Professor&Head/MCA  
903 – EBET GROUP OF INSTITUTIONS

Second Auditor

  
Signature of the Second Auditor

  
Signature of the Chief Auditor

## EXTERNAL AUDIT REPORT

**G. NALLAKUMARASAMY**  
Asso. Professor & Head / AUTO  
605- KSR CE  
Chief Auditor

**V.K.SENTHIL RAGAVAN**  
Asst. Professor & Head/ MCA  
903- EBET  
Second Auditor

Institution : 803 – SONA COLLEGE OF TECHNOLOGY  
Programme(s) : All UG & PG Programme  
Date of Audit : 23.04.2010

### General Observations:

- i) Internal Tests:
  - Verified all programmes and found to be satisfactory
- ii) Assignments
  - Verified all programmes and found to be satisfactory
- iii) Maintenance of students records
  - Verified and found to be satisfactory
- iv) Counseling and guidance to students by faculty members:
  - Verified all programmes and found to be satisfactory
- v) Lesson plans and curriculum delivery methods
  - Verified Lecturer Notes, OHP Sheets, Power points presentation and found to be good
- vi) Maintenance of records by faculty members
  - Verified and found to be satisfactory
  - Records are maintained perfectly
- vii) Awareness and adherence to policy
  - Well understood by the faculty in time

- ❖ Any innovative development of educational methodology / work towards evaluation, improved and effective curriculum delivery and evaluation techniques.

1. Proto type models can be developed/displayed

- ❖ List of non-conformities with university policy and unacceptable deficiency in standards.

--- NIL ---

Any specific recommendation on faculty development:

- ❖ Faculty members are asked to maintain the filing system properly

Any Specific instance of excellence:

- ❖ Faculty Counseling record maintained by Dept. of Fashion Technology was good

Existence of Confidential audit report, if any: Nil

S. No.	Auditors	Name & Institution	Designation	Signature with Date
1	Chief Auditor	G.Nallakumarasamy 605 – KSR CE	Asso. Professor & Head Automobile	<i>[Signature]</i> 23/11/16
2	Second Auditor	V.K.Senthil Ragavan 903 – EBET	Asst. Professor & Head MCA	<i>[Signature]</i> 23/11/16

## ENCLOSURE 1

**List of General Documents Produced by the Department for Audit**  
(Put tick Mark if produced by the department, else leave as blank)

Document Name		
1.	Semester Wise nominal Roll of Students	✓
2.	Faculty List in the format	✓
3.	Continuous record of Audits	✓
4.	Up-to-date Compendium / Compilation / Copy of regulations with updated entry of Amendments	✓
5.	Daily students Attendance Register	✓
6.	Summary of semester / Trimester attendance reports of last two semester / trimesters	✓
7.	Copy of results of last two semester (One Year) examinations including internal assessment and arrear examinations for all programmes.	✓
8.	Copy of internal assessment records for all programmes for all semesters / trimesters from (including) that last seen by internal auditors.	✓
9.	Copy of results of internal tests for all semester / trimester from	✓
10.	All external practical examination records	✓
11.	Lesson plans used by all faculty members in the department, other innovative educational techniques / aids, transparencies, power point presentations etc.	✓
12.	Student information system: Notices and displayed literature / instructions received from examination cell / chief superintend for dissemination	✓
13.	State of laboratory and workshop equipment for exams	✓
14.	Status of availability of assistant examiners / skilled assistants for conduct of practical examinations	✓
15.	Warning / Counseling register for students and record / file of letters to parents / guardians	✓
16.	Academic counseling record of faculty members	✓
17.	Innovative work / practical project of students	✓
18.	Papers / Projects presented by faculty members	✓
19.	Feedback report from students during departmental academic meetings	✓
20.	Suggestion book / complaints of students / parents by letter	✓
21.	Any feedback report from industry etc, on students / academic matters	✓
22.	Audit report files of departments	✓
23.	Continuous record of Audits of departments	✓
24.	Action taken report (by departments subsequent to last internal audit)	✓

Enclosure 2

**2. List of Students records audited**

S. No.	Name of the Student	Branch
1.	P.S.Anusuyadevi	MCA
2	P.Nancy Priya	CSE
3	N.Sivaraj	ECE
4	T.Sudha	IT
5	R.Ragu	EEE
6	V.Sivanayagi	CIVIL
7	S.Vigneswaran	FT
8	S.Pravallika	MBA
9	Sheeba Kumari	ECE-PG
10	All records of Mechanical Engineering	

Enclosure 3

**3. List of Faculty records audited**

S. No.	Name of the Faculty	Designation & Department
1	P. Arunkumar	Lecturer/MCA
2	N. Nithya	Lecturer/MBA
3	R. Subhashini	Lecturer/CSE
4	K.S.Yamuna	Lecturer/EEE

Enclosure 4

4. List of students Interviewed

S. No.	Name of the Student	Branch
1	R.Karthiga	MCA
2	C.S.Monisha	CSE
3	Udhaya Kumar	ECE
4	R.Prabhakaran	EEE
5	V.Sivanayagi	CIVIL
6	S.Vigneswaran	FT
7	S.Pravallika	MBA
8	Sheeba Kumari	ECE-PG

Enclosure 5

5. List of Faculty Interviewed randomly

S. No.	Name of the Staff	Designation	Branch
1	D.Rajavel	Lecturer	MCA
2	S.Namagiri	Lecturer	IT
3	R.Prabakaran	Lecturer	EEE
4	M.Srividhya	Lecturer	FT
5	A.Radhakrishnan	Lecturer	ECE-PG

Enclosure 6

6. List of Faculties called for counseling with brief details of nature of counseling conducted

- DOES NOT ARISE -

**7. List of documents for the conduct of practical internal assessment**

- a. Practical Exam observation Notebooks
- b. Practical Exam records
- c. Attendance and Assessment record of Faculty
- d. Lab Manual
- e. Stock Register
- f. List of Equipments
- g. List of eligible practical examiners

**8. List of general observations on the following**

**i. Internal Tests**

Internal Test note books are signed by the faculty in-charge , HOD and Dean concerned

**ii. Assignments**

- ✓ Assignments titles and evaluation of assignments are good and well maintained
- ✓ Detailed write up is given on latest topics and presented in the class room.

**iii. Maintenance of records by students**

Well maintained and updated

**iv. Correction and guidance to students by faculty members**

Proper guidance as and when required correction is made by the faculty members

**v. Lesson plans on curriculum delivery methods**

Lesson plans involve tutorial class and specific models, if required Teaching aids are utilized



vi. **Maintenance of records by faculty members**

Department wise internal tests, attendance percentage entry are in uniform pattern.

vii. **Awareness and Adherence to policy**

- ✓ Compendium file was available
- ✓ Faculty counseling file was available
- ✓ Internal auditing was conducted on 10.04.2010

9. **Any innovative development of educational methodology work towards evaluation, improved and effective curriculum delivery and evaluation techniques**

- i. Well maintained language laboratory, common computer centre and conducive class room atmosphere, OHPs, LCD & Public address systems.
- ii. Examination data centre in EMS
  - 1. Copy of documents made available with Dean
  - 2. Adequate visual isolation is there
  - 3. Adequate furniture is available

10. **List of non-conformities with university policy and unacceptable deficiency in standards**

NIL

11. **Any specific recommendations on faculty development**

NIL

12. **Any specific instance of excellence**

- i. Well maintained walk around facilities, labs state of the art Central library.

13. **Confidential Audit Report if Necessary :**

NIL

  
Prof.V.K.Senthil Ragavan  
Second Auditor

  
Prof.G.Nallakumarasamy  
Chief Auditor