# Sri Sivasubramaniya Nadar College of Engineering

Rajiv Gandhi Salai (OMR) Kalavakkam – 603 110 Kanchipuram Dist.



# Annual Quality Assurance Report (AQAR) of the IQAC for 2012-13

# Submitted to



NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL

P.O. Box No. 1075 Nagarbhavi Bangalore – 560072

# The Annual Quality Assurance Report (AQAR) of the IQAC for 2012-13

# PART - A

AQAR for the year	2012 - 13

# I. Details of the Institution

1.1 Name of the Institution	Sri Sivasubramaniya Nadar College of Engineering
1.2 Address Line 1	Rajiv Gandhi Salai (OMR)
Address Line 2	Kalavakkam – 603 110

	Kalavakkam
City/Town	

State	Tamil Nadu	

Pin Code	603 110
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Institution e-mail address	nfo@ssn.edu.in
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Name of the Head of the Institution: Dr. S. Salivahanan

Tel. No. with STD Code: 044-27469752

Mobile: 09444189433

Nan	ne of the IC	QAC Coordin	ator:	Dr. Sriniv	vas Gumparthi		
Mol	oile:			09444104	4060		
IQA	AC e-mail a	address:		ssniqac@	ssn.edu.in		
1.3	NAAC Tı	rack ID (For	ex. MHCO	GN 18879)	TNCOGN1422	29	
		OR					
1.4	(For Exam This EC n	ecutive Com nple EC/32/A o. is availabl stitution's Ac	&A/143 dat e in the righ	ed 3-5-200 at corner- b	ottom		
1.5	Website a	ddress:	www.ssi	n.edu.in			
	W	eb-link of th	ne AQAR:	-	/ww.ssn.edu.in/wp /uploads/2016/03		13.pdf
1.6	Accredita	tion Details					
	Sl. No.	Cycle	Grade	CGPA	Year of Accreditation	Validity Period	
	1	1 <sup>st</sup> Cycle	A	3.13	2011	5 Years	
	2	2 <sup>nd</sup> Cycle					
	3	3 <sup>rd</sup> Cycle		·			

1.7 Date of Establishment of IQAC :	01.07.2011
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4<sup>th</sup> Cycle

4

1.8 Details of the previous year's AQAR submitted to NAAC after the latest Assessment and Accreditation by NAAC ((for example AQAR 2010-11submitted to NAAC on 12-10-2011)

1.9 Institutional Status
University State Central Deemed Private
Affiliated College Yes V No
Constituent College Yes No
Autonomous college of UGC Yes No
Regulatory Agency approved Institution Yes  No (AICTE)
Type of Institution Co-education   Men  Women
Urban Rural ✓ Tribal
Financial Status Grant-in-aid UGC 2(f) UGC 12B
Grant-in-aid + Self Financing ☐ Totally Self-financing ✓
1.10 Type of Faculty/Programme
Arts Science Commerce Law PEI (Phys Edu)
TEI (Edu) Engineering  Health Science Management
Others (Specify)
1.11 Name of the Affiliating University (for the Colleges)  Anna University, Chennai
1.12 Special status conferred by Central/ State Government UGC/CSIR/DST/DBT/ICMR etc
Autonomy by State/Central Govt. / University  Applied for Autonomous and University Status
University with Potential for Excellence UGC-CPE

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DST Star Scheme	U	GC-CE	
UGC-Special Assistance Programme	D	ST-FIST	
UGC-Innovative PG programmes	A	ny other (Specify)	
UGC-COP Programmes			
2. IQAC Composition and Activition	<u>es</u>		
2.1 No. of Teachers	9	]	
2.2 No. of Administrative/Technical staff	5	]	
2.3 No. of students	2		
2.4 No. of Management representative	1	]	
2.5 No. of Alumni	2	]	
2. 6 No. of any other stakeholder and community representatives (parent)	1	]	
2.7 No. of Employers / Industrialists	1		
2.8 No. of other External Experts	1	]	
2.9 Total No. of members	22		
2.10 No. of IQAC meetings held	1	]	

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.11 No. of meetings with various stakeholders: No. 1 Faculty
Non-Teaching Staff  Students  Alumni  Others
.12 Has IQAC received any funding from UGC during the year?  If yes, mention the amount  .13 Seminars and Conferences (only quality related)
(i) No. of Seminars/Conferences/ Workshops/Symposia organized by the IQAC
Total Nos.
(ii) Themes  1. Guest lecture on "Effective Leadership"  2. Workshop on "Profession Skill Development"
.14 Significant Activities and contributions made by IQAC
1. Regular internal audits (twice in a year)
2. ISO 9001:2015 Quality standards awareness programmes
.15 Plan of Action by IQAC/Outcome
The plan of action chalked out by the IQAC in the beginning of the year towards quality enhancement and the outcome achieved by the end of the year*
Plan of Action Achievements
Risk Management Process  Risk Management Process is included in the scope of internal audits. Successfully completed Risk Assessment department wise
ISO 9002:2015 Standards Standards implementation was successfully completed
implementation  Quality Management Group  Awareness program is conducted on internal audit on ISO 9001:2015
.15 Whether the AQAR was placed in statutory body Yes V No
Management Syndicate Any other body
Provide the details of the action taken
AQAR report for 2012-13 was placed in the Governing Council meeting and approved.

# PART - B

# Criterion - I

# **1. Curricular Aspects**

Level of the Programme	Number of existing Programmes	Number of programmes added during the year	Number of self-financing programmes	Number of value added / Career Oriented programmes
Ph.D.	9	-	9	-
PG	8	1	9	
UG	8	-	8	-
PG Diploma	-	-	-	-
Advanced Diploma	-	-	-	-
Diploma	-	-	-	-
Certificate	-	-	-	-
Others	-	-	-	-
Total	25	1	26	
Interdisciplinary	-	-	-	-
Innovative	-	_	_	_
	Curriculum: CF	BCS Core 🗸	Elective option	✓ Open options
	rammes:		Elective option	✓ Open options
2 (i) Flexibility of the (ii) Pattern of progr	rammes:  Number	of programmes es are of Semester patt		✓ Open options
2 (i) Flexibility of the (ii) Pattern of progr	rammes:  Number	of programmes		✓ Open options
2 (i) Flexibility of the (ii) Pattern of progr Pattern Semester A	rammes:  Number	of programmes		✓ Open options
2 (i) Flexibility of the (ii) Pattern of progr Pattern Semester A Trimester	number Number Il the programme	of programmes es are of Semester patt		✓ Open options   ✓ Students ✓
2 (i) Flexibility of the  (ii) Pattern of progr  Pattern  Semester A  Trimester  Annual  3 Feedback from stake	Number Il the programme	of programmes es are of Semester patte	ern  Employers	

1.4 Whether there is any revision/update of regulation or syllabi, if yes, mention their salient aspects.

Being an affiliated institution, revision or updation is done by university. Many of our faculty are members in Board of Studies / Academic Council of the university

1.5 Any new Department/Centre introduced during the year. If yes, give details.

MF in	Manufacturin	a Engineering
1V1.L. III .	ivianuracium	g Engineering

# Criterion - II

# 2. Teaching, Learning and Evaluation

2.1 Total No. of permanent faculty

Total	Asst. Professors	Associate Professors	Professors	Others
242	146	51	45	-

2.2 No. of permanent faculty with Ph.D.

109

2.3 No. of Faculty Positions Recruited (R) and Vacant (V) during the year

	sst. essors	Assoc Profes		Profe	essors	Oth	ners	То	tal
R	V	R	V	R	V	R	V	R	V
15	5	5	5	3	6	-	-	23	15

2.4 No. of Guest and Visiting faculty and Temporary faculty

10

2.5 Faculty participation in conferences and symposia:

<u> </u>	•	1	
No. of Faculty	International level	National level	State level
Attended	102	79	54
Presented papers	110	54	-
Resource Persons	22	53	14

- 2.6 Innovative processes adopted by the institution in Teaching and Learning:
  - Technology enabled learning
  - Digital library
  - Project based learning
  - Involving students in research
- 2.7 Total No. of actual teaching days during this academic year

180

2.8 Examination/ Evaluation Reforms initiated by the Institution (for example: Open Book Examination, Bar Coding, Double Valuation, Photocopy, Online Multiple Choice Questions)

Not Applicable

2.9 No. of faculty members involved in curriculum restructuring/revision/syllabus development as member of Board of Study/Faculty/Curriculum Development workshop

12

2.10 Average percentage of attendance of students

85.5

# 2.11 Course/Programme wise distribution of pass percentage:

Title of the Programme	Total no. of students appeared	Distinction %	I %	Division II %	III %	Pass %			
	UG Programmes								
B.E. (EEE)	132	9.85	83.33	6.06	-	99.23			
B.E. (ECE)	130	19.2	66.9	6.9	-	92.37			
B.E. (CSE)	129	13	99	6	11	91.47			
B. Tech. (IT)	128	9	105	14	-	100			
B.Tech- (Chemical)	29	34.5	58.6	3.45	-	96			
B.E. (BME)	62	8	74	8	-	90.3			
B.E. (Mechanical)	67	19.4	68.66	1.5	-	89.55			
B.E. (Civil)	-	-	-	-	-	-			
		PG Prograi	nmes						
M.E. (PED)	16	18.75	81.25	-	-	100			
M.E. (AE)	18	11.1	88.9	-	•	100			
M.E. (CS)	35	42.9	57.1	ı	1	100			
M.E. (VLSI)	33	18.2	75.8	ı	1	94.0			
M.E.(CSE)	36	5	30	1	-	100			
M.E.(S/W Engg.)	18	0	13	2	5	83.33			
M.E. (Comp. & Commn.)	17	41.18	52.94	-	-	94.12			
MBA	101	5	77	14	0	96			

### 2.12 How does IQAC Contribute/Monitor/Evaluate the Teaching & Learning processes:

Each student is assigned a mentor who monitors the progress of the students under him and offers guidance. Class Committees are formed in each department for quality enhancement teaching and learning process. The Class Committees monitor the progress of Teaching and Learning at the Class level. The Heads of departments monitor the progress of students after each of the three Internal Assessment Test Cycles. The students needing improvement and support are taken care of by the assigned Mentors. The IQAC sets the guidelines for the process of these internal monitoring and reviews at the end of every semester. Based on pass percentage, University ranks and placement statistics, required changes are suggested by IQAC.

### 2.13 Initiatives undertaken towards faculty development

Faculty / Staff Development Programmes	Number of faculty benefitted
Refresher courses	7
UGC – Faculty Improvement Programme	-
HRD programmes	2
Orientation programmes	4
Faculty exchange programme	-
Staff training conducted by the university	3
Staff training conducted by other institutions	17
Summer / Winter schools, Workshops, etc.	159
Others	2

### 2.14 Details of Administrative and Technical staff

Category	Number of Permanent Employees	Number of Vacant Positions	Number of permanent positions filled during the Year	Number of positions filled temporarily
Administrative Staff	61	-	1	-
Technical Staff	67	-	11	-

# Criterion - III

# 3. Research, Consultancy and Extension

# 3.1 Initiatives of the IQAC in Sensitizing/Promoting Research Climate in the institution

The IQAC has been instrumental in initiating the Funding for Innovative Proposals Scheme(FIPS) to promote research culture among students and faculty. Dean (Research) calls for proposals from both students and faculty. The proposals received are scrutinised internally and then by a committee consisting of internal and external research experts. The most promising proposals are then funded by the SSN. Student projects are funded upto Rs. 25,000 and faculty projects are funded upto Rs.5 lakh per project. Over Rs. 1 crore worth of funding is provided to students and faculty every year. This scheme has been successful in generating interest among the students towards research and has led to even UG students publishing in international journals. Incentives are given for faculty who have published research papers in refereed journals and guided Ph.D. scholars.

### 3.2 Details regarding major projects

	Completed	Ongoing	Sanctioned	Submitted
Number	6	11	9	38
Outlay in Rs. Lakhs	107.94	253.76	183.97	838.12

# 3.3 Details regarding minor projects

	Completed	Ongoing	Sanctioned	Submitted
Number	3	7	13	18
Outlay in Rs. Lakhs	11.83	19.38	20.1	24.35

# 3.4 Details on research publications

	International	National	Others
Peer Review Journals	180	2	-
Non-Peer Review Journals	26	-	-
e-Journals	1	-	-
Conference proceedings	207	104	-

# 3.5 Details on Impact factor of publications:

Range   Upto 5.039   Average   2.317   h-index   17   Nos. in SCOPUS   160	Range	Upto 5.039	Average	2.317	h-index	17	Nos. in SCOPUS	160	]
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3.6 Research funds sanctioned and received from various funding agencies, industry and other organisations Department wise:

# EEE

Nature of the Project	Duration Year	Name of the funding Agency	Total grant Sanctioned (in lakhs)	Received (in lakhs)
	2013-16	AICTE	24.50	23.83
Major projects	2013-2014	AICTE	19.51	
		CWET		2.00
Minor Projects				
Interdisciplinary Projects				
Industry sponsored				
Projects sponsored by the University/ College				
Students research projects (other than compulsory by the University)	2012-2013	SSN Trust	0.92	0.85
Any other(Specify)				
Total			44.93	26.70

# **ECE**

Nature of the Project	Duration Year	Name of the funding Agency	Total grant Sanctioned (in lakhs)	Received (in lakhs)
Major projects				
Minor Projects				
Interdisciplinary Projects				
Industry sponsored				
Projects sponsored by the University/ College	2012-2013	SSN Trust	1.25	
Students research projects				
Any other(Specify)				
Total		_	1.25	

# IT

Nature of the Project	Duration Year	Name of the funding Agency	Total grant Sanctioned (in Lakhs)	Received (in Lakhs)
Major Projects		DIT,MCIT		11.34
Major Projects		DRDO		1.97
Minor Projects				
Interdisciplinary Projects				
Industry sponsored				
Projects sponsored by the University/ College				

Students research projects		
Any other(Specify)		
Total		13.31

# Chemical

Nature of the Project	Duration Year	Name of the funding Agency	Total grant Sanctioned (in lakhs)	Received (in lakhs)
Major projects				
Minor Projects				
Interdisciplinary Projects				
Industry sponsored				
Projects sponsored by the	2012-2013	SSN Trust	8.50	
University/ College				
Students research projects	2012-2013	SSN Trust	0.70	0.45
Any other(Specify)				
Total			9.20	0.45

# **BME**

Nature of the Project	Duration Year	Name of the funding Agency	Total grant Sanctioned (in Lakh)	Received (in Lakh)
Major projects				
Minor Projects				
Interdisciplinary Projects				
Industry sponsored				
Projects sponsored by the University/ College				
Students research projects	2012-2014	SSN Trust	1.41	0.96
Any other(Specify)				
Total			1.41	0.96

# Mechanical

Nature of the Project	Duration Year	Name of the funding Agency	Total grant Sanctioned (in lakhs)	Received (in lakhs)
Major projects	2012-15	AICTE under RPS	18.65	
Minor Projects				
Interdisciplinary Projects				
Industry sponsored				
Projects sponsored by the College	2012-14	SSN Trust	9.00	
Students research projects	2012-13	SSN Trust	1.50	1.12
Any other(Specify)			_	
Total			29.2	1.12

# S&H

Nature of the Project	Duration Year	Name of the funding Agency	Total grant Sanctioned (in lakhs)	Received (in lakhs)
Major projects				
Minor Projects				
Interdisciplinary Projects				
Industry sponsored				
Projects sponsored by the University/ College	2012-2013	SSN Trust	15.00	13.57
Students research projects (other than compulsory by the University)				
Any other(Specify)				
Total			15.00	13.57

the University)	ipuisory by							
Any other(Spec	eify)							
Total	<b>3</b> /				1.	5.00	13.5	57
3.7 No. of books public		ISBN No.		Chapters	s in Ec	dited Boo	oks	2
3.8 No. of University I	•							
	UGC-SAI	P -	CAS -		DST	Γ-FIST		1
	DPE	-			DB	Γ Schem	e/funds	-
3.9 For colleges	Autonomy INSPIRE	1	CPE CE	-		Γ Star So		-
3.10 Revenue generate	d through cons	ultancy	Rs.3.87	Lakh				
3.11 No. of conference <b>EEE</b>	es organized by	the Institution	on					
Level	International	National		State	Uni	versity	College	
Number			1			-		
Sponsoring agencies		SSN Tru	ıst, CSIR					
ECE								_
Level	International	National	State	Univers	sity	College		
· · · · · · · · · · · · · · · · · · ·	1		1		1			

Level	International	National	State	University	College
Number		1			
Sponsoring agencies		SSN Trust			

# Chemical

Level	International	National	State	University	College
Number		3			

Sponsoring agencies		SSN Tru	et									
sponsoring agencies		33N 11u	ısı									
BME	1											
Level	International	National	Sta	te	Uni	iversity	Col	llege				
Number	1											
Sponsoring agencies	SSN Trust											
Mechanical												
Level	International	National	Sta	te	Uni	iversity	Col	llege				
Number	Nil	2										
Sponsoring agencies		CSIR										
Chemistry												
Level	International	National		Stat	e	Univers	sity	Colle	ege			
Number		1										
Sponsoring agencies		SSN Tru	ıst									
3.12 No. of faculty ser	ved as experts, o	chairperson	s or	resou	ırce	persons		1				
3.13 No. of collaborati	ions	Internation	nal	3	N	Vational	L	70	Aı	ny othe	r	
3.14 No. of linkages created during this year 7												
3.15 Total budget for research for current year in lakhs :												
From Funding agency	Rs. 155 Lak	h From	Man	agen	nent	of Unive	ersity	y/Colle	ege	Rs. 1	19 La	ıkh
Total	Rs.274 La	ıkh										

3.16 No. of patents received this year

Type of Patent		Number
National	Applied	2
INational	Granted	-
International	Applied	
International	Granted	-
C	Applied	
Commercialised	Granted	-

3.17 No. of research awards / recognitions received by faculty and research fellows Of the institute in the year

Total	International	National	State	University	Dist	College
35	4	12	1	-	-	18

3.18 No. of faculty from the Institution who are Ph. D. Guides and students registered under them   69  156	
3.19 No. of Ph.D. awarded by faculty from the Institution 13	
3.20 No. of Research scholars receiving the Fellowships (Newly enrolled + existing ones)	
JRF 15 SRF - Project Fellows 7 Any other -	
3.21 No. of students Participated in NSS events:	
University level 30 State level 25	
National level 5 International level -	
3.22 No. of students participated in NCC events: Not Applicable	
University level _ State level _	
National level International level	
3.23 No. of Awards won in NSS:	
University level 3 State level	٦
National level International level -	_
3.24 No. of Awards won in NCC: Not Applicable	_
University level _ State level _	
National level International level	_ ]
3.25 No. of Extension activities organized	_
University forum - College forum -	
NCC - NSS 21 Any other -	
3.26 Major Activities during the year in the sphere of extension activities and Institutional Social Responsibility	
1. Campus Clean Up	
2. Sports Day parade	
3. Blood Donation Camp was organized in association with Dhanvandri Blood Bank (NGO).	

of the orphanage.

6. Visited Arul Illam and taught subjects like Science and Mathematics to the  $10^{\text{th}}$  standard students

4. Visited an orphanage, Arul Illam near Kolapakkam

5. Free Eye Check Up in association with Vasan Eye Care

- 7. In association with Bhoomi (NGO) cleaned both in-patient and out-patient wards housed in a four storey building at Stanley Hospital, Chennai as part of Joy of Giving week
- 8. In association with Ekam (NGO) cleaned the both in-patient and out-patient wards of Child Hospital, Egmore and RSRM Hospital, Chennai as part of Joy of Giving week.
- 9. Visit to Goonj (NGO) as part of Joy of Giving Week.
- 10. Mr. Ramachandra, INTERPOL Drugs Expert's lecture on "Dangers of Drug Abuse"

# **Criterion - IV**

# 4. Infrastructure and Learning Resources

### 4.1 Details of increase in infrastructure facilities:

Facilities	Existing	Newly created	Source of Fund	Total
Campus area (Built-up area in Sq.m.)	132970	-	SSN Trust	132970
Class rooms (in Sq.m.)	9322 (108 Nos.)	-	SSN Trust	9322 (108 Nos.)
Laboratories (in Sq.m.)	17796 (88 Nos.)	-	SSN Trust	17796 (88 Nos.)
Seminar Halls (in Sq.m.)	4991 (15 Nos.)	-	SSN Trust	4991 (15 Nos.)
No. of important equipments purchased (≥ 1-0 lakh) during the current year.	1480	233	SSN Trust	1713
Value of the equipment purchased during the year ( in Lakhs)	1252.95	72.72	SSN Trust	1325.67

# 4.2 Computerization of administration and library

- Koha Software is installed in Central Library which enables campus wide access.
- Administrative Departments are computerised and all faculty members provided with laptops and computers.

# 4.3 Library services:

	Existing		Newly	added	Total		
	No.	Value in Rs.	No.	Value in Rs.	No.	Value in Rs.	
Text Books	46013	17,898,988	5416	1,804,891	51429	19,703,879	
Reference Books	2438	5,805,571	196	829,452	2634	6,635,023	
e-Books	363	105,342	_	-	363	115,545	
Journals	141	2,001,989	32	604,869	173	2,606,858	
e-Journals	2416	2,797,918	252	207,412	2668	3,005,330	
Digital Database	9	2,903,260	-	-	9	3,120,875	
CD & Video	360	171,622	37	25,967	397	197,589	
NPTEL Video	110	100,000	-	-	110	100,000	
NPTEL Web Courses	129	100,000	-	-	129	100,000	
Book Bank	854	271,620	-	-	854	271,620	

# 4.4 Technology up gradation (overall)

	Total Computers	No. of computers in Labs	Internet	Browsing Centres	No. of Computer Centres	No. of comp uters in Offic e	No. of comput ers Departments	Other s
Existing	1864	1356	25 + 25 Mbps	-	22	49	435	-
Added	228	223	-	-	2	-	5	-
Total	2092	1579	25+25 Mbps	-	24	49	440	-

- 4.5 Computer, Internet access, training to teachers and students and any other programme for technology upgradation (Networking, e-Governance etc.)
  - Refresher programs and workshops on technology enabled learning conducted every year.
  - First year students form rural areas are given an orientation on technology and internet usage.
- 4.6 Amount spent on maintenance in lakhs:

i) ICT	Rs. 33 Lakh
ii) Campus Infrastructure and facilities	Rs.435 Lakh
iii) Equipments	Rs. 44 Lakh
iv) Others	Rs. 16 Lakh
Total:	Rs. 528 Lakh

# Criterion - V

# 5. Student Support and Progression

- 5.1 Contribution of IQAC in enhancing awareness about Student Support Services
  - 1. IQAC with the advice from college management and in consultation with the Placement cell discussed strategies to enhance placements for the final year students.
  - 2. The Placement cell explored suitable Training Partner to train the students for campus interviews.
  - 3. The placement officer addressed the students about the need to attend placement training and the benefits thereof.

	5.2	<b>Efforts</b>	made by	v the	institution	for	tracking	the	progressio
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- 1. The college signed up Placement Training agreement with Vista Mind to train the students on Quantitative aptitude, logical reasoning and verbal aptitude.
- 2. The placement cell also organized training session with alumni students on how to prepare Resume and attend GD / personal interviews.
- 3. The placement officer randomly sat through the training sessions, collected feedback from the students and suggested corrective actions to the training partner.
- 5.3 (a) Total Number of students

UG	PG	Ph. D.	Others
3145	596	169	

(b) No. of students outside the state

30

(c) No. of international students

0

	No	%
Men	2209	56

ŀ

No	%
1701	44

	Last Year								This Ye	ear	
General	SC	ST	OBC	Physically Challenged	Total	General	SC	ST	OBC	Physically Challenged	Total
1117	351	25	2017	3	3513	1138	398	22	2178	5	3741

Demand ratio 1:17

Dropout Less than 1%

5.4 Details of student support mechanism for coaching for competitive examinations (If any)

Placement Training

Career development guidance

Personality Development Programs

No. of students beneficiaries

All students placed

5.5 No. of students qualified in these examinations

NET -

SET/SLET

-

GATE

9

-

IAS/IPS etc

-

State PSC

1

**UPSC** 

1

Others

CAT

58

5.6 Details of student counselling and career guidance

1. Individual counselling: 625 students

2. Group counselling: 60 students

3. Psycho educational programs: 2 programs 300 students

No. of students benefitted

985

# 5.7 Details of campus placement

On car	mpus			Off Campus
S. No.	Number of Organizations Visited	Number of Students Participated	Number of Students Placed	Number of Students Placed
1	Zifo Technology, Chennai.	38	6	
2	Mu Sigma Business Solutions Pvt.	626	18	
	Ltd.			
3	Amazon.com	357	2	
4	Real Image Media Technology, Chennai.	160	2	
5	Temenos	170	10	
6	ThoughtWorks Technology	570	4	
7	Fidelity India, Bangalore	314	16	
8	Zoho Corporation	739	24	
9	Sundaram Auto Components Ltd.	24	1	
10	Harita Fehrer Ltd	24	1	
11	Intellect Design (Polaris)	205	4	
12		94	6	
	Lister Technology	218	2	
	TATA Elxsi, Bangalore.	252	66	
15	Trimble Technology, Chennai.	25	2	
	Latent View Analytics, Chennai.	421	6	
17	Go Frugal, Chennai.	730	7	
	Fresh Desk, Chennai.	240	23	
19	Multicoreware Technology	56	2	
20	Verizon	185	6	
21	Infotrellis	151	3	
22	Hyundai Motor India Ltd.	133	2	
23	Infosys Technology	623	249	
24		755	387	
	L&T ECC, Chennai.	104	9	
	Wipro Technology	450	204	
27	Accenture Technology	526	183	
	TATA Consultancy Services	654	170	
29	J	122	13	
30	Ashok Leyland Ltd.	83	4	
31	ABB India Ltd, Bangalore.	34	4	
32	Dow Chemicals Ltd, Chennai.	7	2	
33	·	48	2	
34	Sundram Fasteners, Chennai.	64	5	
35	SAP Labs India, Bangalore.	159	5	
36	KLA Tencor	5	1	
37	CherryTin Online Pvt. Ltd.	1	1	
38		1	1	
39	, ,	209	4	
40	Global Analytics Inc, Chennai.	148	3	
41	BA Continuum India. Chennai.	74	15	
42	MRF India Pvt. Ltd	90	2	
43	Coda Global Software Solutions Pvt. Ltd.	101	7	

44	Brakes India Pvt. Ltd.	22	1	
45		97	2	
	•	73	6	
46	,			
47	,	129 4	3	
48	Toshiba Machine Pvt. Ltd.,	4	3	
40	Chennai.	07		
49	Alcatel Lucent	87	5	
50	•	83	4	
	Services Pvt. Ltd.	4.15		
51	AstraZeneca, Chennai.	145	6	
	Huawei Technology India Pvt. Ltd.	71	2	
	CNS Inc	30	4	
	Microchip India	45	2	
55	Hexagon Capability Center India	81	2	
	Pvt. Ltd			
56	Software AG Bangalore	152	2	
	Technologies Pvt. Ltd			
57	Penna Cement Ltd	21	1	
58	Unitech Transfer GmbH-German	86	6	
	Centre for Automation and Robotics			
	Germany			
59	Renault Nissan	68	4	
60	Saint Gobain	16	1	
61	Bally Technologies	32	7	
62		13	3	
63	CSS Corporation, Chennai.	27	4	
	GrundfosX (Off Campus)	1		1
65	ZoomRx Healthcare Technology	8		2
	Solutions Pvt. Ltd. (Off Campus)			
66	Perficient India Pvt. Ltd. (Off	1		1
	Campus)			
67	City Union Bank	25	2	
	L & T Infotech	37	3	
69	Zoho	49	4	
70		17	2	
	One Globe Systems	9	1	
	Janalakshmi	21	2	
	Vista Soft	7	1	
	ITC Transfer	34	1	
	Covenant India	9	3	+
	Shriram Capital	4	1	
	•	42	7	
	Sundaram Fasteners	5	1	
	TCS	38	2	
		4		
	Loyal Textile Mills		1 5	
	Smartmegh Solutions	20	5	+
82	Kaleesuwari	6	4	+
83	Aspire Systems	4	1	
		20	1	-
85		5	1	+
	Madras Cements	8	2	
87		5	2	
88	BNY Mellon	8	2	

89	Axis Bank	19	5	
90	Eurocon Tiles	1	1	
91	Butterfly Appliances	18	2	
92	TNQ Books & Journals	1	1	
93	Tring Apps	5	2	
94	Karya Technologies	12	1	
95	Trans Learn Solutions	1	1	
96	Kumaran Systems	15	2	
97	Real Image Media	6	1	
98	Auro Media	2	1	
99	Systech Solutions	4	1	
100	99 Acres	26	1	
101	Enzotech	8	1	

	5.8	<b>Details</b>	of s	gender	sensitization	programme
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Lectures were arranged on importance of women education and corresponding increase in socio-economic equality

# 5.9 Students Activities

5.9.	.1 No. of students partic	cipated in	Sports, Games a	nd other e	events	
	State/ University level	107	National level	56	International level	13
	No. of students participa	ted in cul	tural events			
	State/ University level	-	National level	410	International level	-
5.9.2	No. of medals /awards w	on by stu	idents in Sports,	Games and	d other events	
Sports	: State/ University level	43	National level	23	International level	3
Cultural	l: State/ University level	-	National level	45	International level	-

# 5.10 Scholarships and Financial Support

	Number of students	Amount in Rs. Lakh
Financial support from institution	471	375
Financial support from government	336	55.47
Financial support from other sources	-	-
No. of students who received International/ National recognitions	-	-

5.11	Student organised / initiative	s			
Fairs	: State/ University level	-	National level	-	International level -
Exhib	ition: State/ University level	6	National level	8	International level

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5.13 Major grievances of students (if any) redressed: There were no major grievances.

# Criterion - VI

# 6. Governance, Leadership and Management

6.1 State the Vision and Mission of the institution

### **Vision Statement**

To be a world-class institution for technical education and scientific research for the public good.

### **Mission Statement**

### SSN will strive continuously to

- Make a positive difference to the society through education
- Empower students from all socio-economic strata to level the academic and professional playing field
- ➤ Be a centre of excellence in education in emerging technologies in tandem with the industry and industrial trends
- ➤ Build world class research facilities on par with the finest in the world and broaden students' horizons beyond classroom education
- Nurture talents and entrepreneurship and enable all-round personality development in students
- 6.2 Does the Institution has a management Information System
  - Academic Planner
  - Institutional Budget & Planning
  - Monthly Performance Report
  - Semester wise Quality Audit Reports
  - Management Review Reports (QMS)
  - Faculty Appraisal Reports
- 6.3 Quality improvement strategies adopted by the institution for each of the following:

### 6.3.1 Curriculum Development

By Anna University. . SSN CE faculty are actively involved in curriculum development as Members of Board of Studies.

# 6.3.2 Teaching and Learning

# By organising

- Additional expert lectures
- Interaction with practising managers,
- Seminars and workshops on pedagogy
- Research seminars
- Internships

### 6.3.3 Examination and Evaluation

By Anna University

### 6.3.4 Research and Development

- Research Advisory Council for focussed research in Engineering, Technology, Science and Management
- Funding by SSN Trust for projects of faculty and students

# 6.3.5 Library, ICT and physical infrastructure / instrumentation

- Upgradation of Library system on annual basis
- Augmentation of e-learning resources

# 6.3.6 Human Resource Management

- Incentives for research
- Performance based incentive
- Travel grant
- Welfare Schemes such as 50% payment of house loan interest
- Subsidised group medical insurance
- Professional Skill Allowance

# 6.3.7 Faculty and Staff recruitment

- 1. Through referrals by academic and industry experts
- 2. Advertisements in national news papers

# 6.3.8 Industry Interaction / Collaboration

Encouraging students to take up industry oriented projects

Invited guest lectures from industry

**Industry visits** 

Involving faculty and students in industry consultancy

### 6.3.9 Admission of Students

The admission for 35% of the seats is conducted by consortium of Self Financing colleges. Merit is the only criterion be it in general stream or reserved stream. Of these seats

- 1. 25 seats are reserved for top rankers in various boards with full scholarships
- 2. 25 seats for sportspersons with full scholarship to pursue and higher education
- 3. 25 seats for meritorious students from rural areas with full scholarships.

The remaining 65% seats are filled through the Anna University single window counselling.

6.4	4 V	Vel	fare	schen	nes	for

Teaching	<ul> <li>Tuition fee concession for wards of faculty studying at SSN</li> <li>Subsidised food at canteen</li> <li>Free Transportation</li> <li>Subsidized Medical Insurance</li> </ul>
Non	<ul> <li>Subsidy on Housing loan interest</li> <li>Reimbursement of children tuition fee</li> </ul>
teaching	<ul><li>Deepavali Bonus</li><li>Subsidized Medical Insurance</li></ul>
	Free transportation
Students	Group Insurance

6.5 Total corpus fund generated	: NIL				
6.6 Whether annual financial audit ha	s been done	Yes	✓	No	

6.7 Whether Academic and Administrative Audit (AAA) has been done?

Audit Type	Ex	ternal	Internal			
	Yes/No	Agency	Yes/No	Authority		
Academic	Yes	TUVNORD	Yes	QMG		
Administrative	Yes	TUVNORD	Yes	QMG		

6.8 Does the University/ Autonomous Colle	ge declares resi	ults wi	thin 30	) days	?
For UG Programm	nes Yes		No	✓	
For PG Programm	ies Yes		No	✓	

6.9	What eff	orts are	made by	the	University/	Autonomous	Colle	ege fo	or l	Examination .	Ref	orms'	,
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Not Applicable
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	6.10 What efforts are made <sup>1</sup>	by the University	to promote autonomy	in the affiliated/constituent of	colleges?
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# 6.11 Activities and support from the Alumni Association

- Alumni meet (TRIBUTE) annually on First Saturday of January every year.
- Scholarship support from Alumni
- Alumni interaction with pre-final and final year students
- Assistance in providing internships & placements

# 6.12 Activities and support from the Parent – Teacher Association

Support is sought from the parents in monitoring the progress of their wards.

- (a) Orientation on opening day for freshers
- (b) Scholarships award function
- (c) College day
- (d) Graduation day

# 6.13 Development programmes for support staff

Increments are given for obtaining higher degrees and they are sponsored for training where necessary

# 6.14 Initiatives taken by the institution to make the campus eco-friendly

- 1. Tobacco free campus.
- 2. A large number of trees planted to supplement green canopy of the campus.
- 3. Motorised two wheelers banned for students in the campus to reduce carbon footprint.
- 4. Spaces in the campus earmarked for parks and green belts.
- 5. Water Treatment Plant installed to recycle water.
- 6. Recycled water used for gardening and landscaping.
- 7. Rainwater harvesting implemented for all buildings.

### Criterion - VII

# 7. Innovations and Best Practices

7.1 Innovations introduced during this academic year which have created a positive impact on the functioning of the institution. Give details.

The institution has conducted a Green Audit of its campus and facilities. The virgin greenery of the campus is maintained. To compensate for the loss of greenery due to the built up area, extensive green coverage has been created. The sewage is treated with a full fledged STP, and the treated water is extensively used to maintain the lawn and watering the trees. Periodical maintenance is done to the STP, so that it functions efficiently throughout the year without interruption.

The rain water is diverted through wide green shallow channels spread over the entire campus which are connected to a pond located on the North East end of the campus, thus ensuring the conservation of rainwater. The college is about 5 km from the sea, and deep wells will result in saline water intrusion and hence, all the sixteen wells spread over the entire campus are shallow, not more than 10m deep. There is a network of well laid out lined channels, which, during heavy rains, discharge the surface water in to the *nallah* there by preventing flooding.

The bank of solar panels located in the open terrace, is essentially used for research; yet, it is used to light partially the street lamps in the campus during nights. A wind mill is on the cards for erection, near the EEE block.

The power position is rather bleak in the state; hence, we are left with no alternative other than relying on the diesel power for the effective running of the Institute. Perhaps, after commissioning of the second unit of IGCAR, the reliance on the DG sets may decrease.

7.2 Provide the Action Taken Report (ATR) based on the plan of action decided upon at the beginning of the year

Refer to the action taken report in Management Review Reports

7.3 Give two Best Practices of the institution (please see the format in the NAAC Self-study Manuals)

# (a) Usage of electronic media in teaching & Learning

This is being extensively used for almost all the courses, so that the student is able to understand the topic better.

The aim is to see that the student has a clear perception of what is being taught and he is able to pursue it on his own, based on the material provided by the instructor.

The faculty teaching a subject splits the syllabus into convenient modules, so that the prerequisites of one module have already been taught to the student earlier, and there is cogency. For each module, he/she prepares a set of information, sketches, graphs etc. and uploads it in the intranet, which the student can browse and see and understand at his own pace and comes prepared to the following class. The teacher elaborates the uploaded notes with illustrations or

case studies or even videos, so that the topic gets embedded into the minds of the students. In addition, he gives a set of locations, where additional explanations are given or where information for further studies is available.

http://www.ssn.net/twiki/bin/view/PhyIntranet/PhyElearning http://www.ssn.net/twiki/bin/view/EceIntranet/EceEngPhy-A-15

# (b) Early induction of a student into research

The aim is to create a curious and enquiring mind and apply the conceptual learning to practical projects. Exposure to research develops a structured and logical thinking process and a few of the outstanding students may be attracted to a career in research.

Students are tagged to faculty and senior students and work on research projects leading to publication in refereed international journals.

# (c) Inculcating personality development in students

The college encourages students to participate in workshops, seminars such as MUN, EDC NSS, YRC, Good Citizens Forum and various students organised club activities are held in the institution, which help the holistic development of the students.

7.4 C	ontribution to environmental awareness / protection
	Green and clean environment is imbibed in every activity of SSN. Environmental protection is a cultural aspect of SSN
7.5 V	Whether environmental audit was conducted? Yes No

# **SWOC** analysis of the Institution and Future plans:

### **Strengths:**

- Dedicated and qualified faculty with diverse research interests
- 250 acre campus with state-of-the-art infrastructure
- Well-equipped labs and digitally enabled classrooms for effective learning
- Large number of externally funded research projects
- Meritorious students, many with interest in research
- Students winning several external awards in recognition of their projects
- Academic collaboration with Institutes of international repute, like Carnegie Mellon University
- Periodic research interventions like International and National Conferences and workshops on varied topics
- Structured system for inducting students into research at an early stage
- Seed funding by SSN Trust for promising research proposals of faculty and students
- Culture of all-round development in Academics, Sports, Music and Arts
- A large number of MoUs with industries and educational institutions of eminence.
- Innovation Centre and Incubation Centre to promote creativity and entrepreneurship
- Ranked among the top ten private engineering colleges in India by reputed agencies

### Weaknesses:

- Limiting influence of affiliation status in curriculum, syllabi and forging external relationships
- Improvement required in Industry-Institute Interaction

### **Opportunities:**

- Good recognition in industry circles evidenced by placement of students. This can help in building stronger links with industry in consultancy.
- Talented students who can be channelized into leadership positions in the years to come.
- Interaction with ASSOCHAM, CII, FICCI, IMTMA and professional bodies
- Tapping the knowledge resources of Alumni who are pursuing successful careers in industry or as Entrepreneurs.

### **Challenges:**

- Commercialisation of the research work done in the Institution and converting them for industrial application
- Being an affiliated institution, it is difficult to integrate the rapidly changing technology

### **Future Plans**

- To obtain autonomous or University status
- To diversify and offer programs in humanities and sciences
- To increase focus on product development and incubation of startups on campus

# 8. Plans of institution for next year

Adding new programmes

Increasing the intake in existing programmes

Augmentation of infrastructure

Dr. Srinivsas Gumparthi

Signature of the Coordinator, IQAC

S. Salivahanan

Signature of the Chairman, IQAC