Sri Sivasubramaniya Nadar College of Engineering

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



Annual Quality Assurance Report (AQAR) of the IQAC for 2014 - 15

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 2014 - 15

PART - A

AQAR for the year

2014 - 15

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

City/Town

Kalavakkam

State

Tamil Nadu

Pin Code

603 110

Institution e-mail address

info@ssn.edu.in

Contact Nos.

044-27469700

Name of the Head of the Institution:

Dr. S. Salivahanan

Tel. No. with STD Code:

044-27469752

Mobile:

09444189433

Name of the IQAC Coordinator:	Dr. Srinivas Gumparthi					
Mobile:	09444104060					
IQAC e-mail address:	ssniqac@ssn.edu.in					
1.3 NAAC Track ID (For ex. MHC OR	COGN 18879) TNCOGN14229					
1.4 NAAC Executive Committee N (For Example EC/32/A&A/143 of This EC no. is available in the r of your institution's Accreditation	dated 3-5-2004. ight corner- bottom					
1.5 Website address: www.	ssn.edu.in					
Web-link of the AQAF	R: http://www.ssn.edu.in/wp-content/uploads/2016/03/AQAR 2014-15.pdf					
1.6 Accreditation Details						

Cl. No	Cyala	Cmada	CGPA	Year of	Validity
Sl. No.	Cycle	Grade	CGPA	Accreditation	Period
1	1 st Cycle	A	3.13	2011	5 Years
2	2 nd Cycle				
3	3 rd Cycle				
4	4 th Cycle				

1.7	Date of	of Estab	lishment	of IQAC:

01.07.2011

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 No No
Constituent College	Yes No
Autonomous college of UGC	Yes No No
Regulatory Agency approved Insti (AICTE)	tution Yes V No
Type of Institution Co-education	on Men Women
Urban	Rural Tribal
Financial Status Grant-in-	aid UGC 2(f) UGC 12B
Grant-in-aid	1 + Self Financing Totally Self-financing
1.10 Type of Faculty/Programme	
Arts Science	Commerce Law PEI (Phys Edu)
TEI (Edu) Engineering	g
Others (Specify)	
1.11 Name of the Affiliating University	ty (for the Colleges) Anna University, Chennai

1.12 Special status conferred by Central/ State Gove	ernment 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
DST Star Scheme	UGC-CE
UGC-Special Assistance Programme	DST-FIST
UGC-Innovative PG programmes	Any other (Specify)
UGC-COP Programmes	
2. IQAC Composition and Activitie	<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

2.11 No. of meetings with various stake	eholders: No. 1 Faculty					
Non-Teaching Staff	Students					
2.12 Has IQAC received any funding fi	rom UGC during the year? Yes No					
If yes, mention the amount						
2.13 Seminars and Conferences (only o	quality related)					
(i) No. of Seminars/Conferences/	Workshops/Symposia organized by the IQAC					
Total Nos. Internation	nal National State 1 Institution Level 1					
	ar on Leadership styles. ar on Green Supply Chain Management					
2.14 Significant Activities and contribu	ntions made by IQAC					
 Regular internal aud ISO 9001:2015 Qua 	lits (twice in a year) lity standards awareness programmes					
2.15 Plan of Action by IQAC/Outcome	•					
Plan of Action	Achievements					
Quality Manual and SOP	ISO 9001:2015:Quality Manual and SOP is designed and Implemented					
Internal Quality Audit	ISO 9001:2015: Internal Quality Audit standard developed for Internal Audit purpose					
Quality Management System	Established in all departments					
Quality Management Group	Auditors are appointed and trained on quality aspects of academics audit					
Academic Audit Teams Trained internal quality auditors						
2.15 Whether the AQAR was placed in	statutory body Yes 🗸 No 📗					
Management Syr	Any other body					
Provide the details of the ac	tion taken					
AQAR report for 2014-15 was	placed in the Governing Council meeting and approved.					

PART - B

Criterion - I

I. Curricular Aspects

1.1 Details about Acad	lemic Programm	es		
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.	10	-	10	-
PG	10	2	12	
UG	8	-	8	-
PG Diploma	1	-	-	-
Advanced Diploma	1	-	-	-
Diploma	-	-	-	-
Certificate	ı	1	1	-
Others	ı	-	ı	-
Total	28	3	31	
Interdisciplinary	-	-	-	-
Innovative	-	-	-	-
.2 (i) Flexibility of the (ii) Pattern of progr		BCS Core 🗸	Elective option	✓ Open options

1.2 (i) Flexibility of the Curriculum (ii) Pattern of programmes:	m: CBCS Core Core Open option Open options
Pattern	Number of programmes
Semester Al	l UG and PG on semester pattern
Trimester	
Annual	
1.3 Feedback from stakeholders* (On all aspects)	Alumni 🗸 Parents 🗸 Employers 🗸 Students 🗸
Mode of feedback :	Online Manual Co-operating schools (for PEI)
*Please provide an analysis of the feed	dback in the Annexure

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.

M. Tech. in Environmental Science and Technology

M.E. in Medical Electronics

Post Graduate Certificate course in Business Analytics (PGCBA)

Criterion - II

2. Teaching, Learning and Evaluation

2.1 Total No. of permanent faculty

Total	Asst. Professors	Associate Professors	Professors	Others
276	136	89	51	0

2.2 No. of permanent faculty with Ph.D.

164

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

	sst. essors	Assoc Profes		Profe	essors	Others		Total	
R	V	R	V	R	V	R	V	R	V
8	3	8	7	2	3	-	-	18	13

2.4 No. of Guest and Visiting faculty and Temporary faculty

7

2.5 Faculty participation in conferences and symposia:

No. of Faculty	International level	National level	State level
Attended	142	92	35
Presented papers	167	76	5
Resource Persons	48	67	27

- 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

28

2.10 Average percentage of attendance of students

86.5

2.11 Course/Programme wise distribution of pass percentage :

Title of the Programme	Total no. of students	Division					
110814111110	appeared	Distinction %	I %	II %	III %	Pass %	
		UG Prograi	mmes				
B.E. (EEE)	144	15.97	75.08	2.7	-	93.75	
B.E. (ECE)	147	25.2	63.9	3.4	-	92.5	
B.E. (CSE)	140	15.7	64.3	6.4	-	86.43	
B. Tech. (IT)	145	9.7	71.0	14.5	-	95.17	
B.Tech- (Chemical)	67	22.3	73.1	-	-	95.5	
B.E. (BME)	67	10.44	64.17	10.44	-	86.36	
B.E. (Mechanical)	145	15.17	82.1	0.69	-	97.93	
B.E. (Civil)	70	10	84.3	4.3	-	98.57	
		PG Progran	nmes				
M.E. (PED)	18	11.1	77.7	-	-	88.8	
M.E. (AE)	18	22.2	77.8	-	-	100	
M.E. (CS)	34	38.2	61.8	-	-	100	
M.E. (VLSI)	34	17.6	82.4	-	-	100	
M.E.(CSE)	36	16.7	77.8	2.8	-	97.22	
M.E.(S/W Engg.)	18	-	94.4	-	-	94.44	
M.Tech (IT)	18	11.1	88.9	-	-	100	
M.E.(Mfg. Engg.)	17	20.58	79.41	_	-	100	
M.E.(Energy)	17	20.58	79.41	-	-	100	
MBA	117	0	71.8	21.4	-	93.2	

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. Every class in each department has a class committee formed for quality enhancement in teaching and learning process. The progress of the students is monitored by the Heads of the Departments after all the three Internal Assessment Test Cycles. Students needing special attention are identified by the respective mentors and offered additional academic and counselling support. The IQAC sets the guidelines for this process and reviews it at the end of every semester. Changes and modifications are suggested by IQAC based on pass percentage, University ranks, placement statistics among other parameters

2.13 Initiatives undertaken towards faculty development

Faculty / Staff Development Programmes	Number of faculty benefitted
Refresher courses	11
UGC – Faculty Improvement Programme	0
HRD programmes	2
Orientation programmes	4
Faculty exchange programme	0
Staff training conducted by the university	8
Staff training conducted by other institutions	23
Summer / Winter schools, Workshops, etc.	270
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	72	-	0	0
Technical Staff	64	-	0	0

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. 30,000 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	5	15	14	56
Outlay in Rs. Lakhs	116.56	303.06	165.35	1624.11

3.3 Details regarding minor projects

	Completed	Ongoing	Sanctioned	Submitted
Number	4	8	27	31
Outlay in Rs. Lakhs	0.79	18.05	25.25	30

3.4 Details on research publications

	International	National	Others
Peer Review Journals	396	3	0
Non-Peer Review Journals	71	2	0
e-Journals	0	1	0
Conference proceedings	254	51	0

3.5 Details on Impact factor of publications:

Range	Upto 4.03	Average	0.23	h-index	22	Nos. in SCOPUS	282
						1	

3.6 Research funds sanctioned and received from various funding agencies, industry and other organisations

Nature of the Project	Duration Year	Name of the funding Agency	Total grant Sanctioned (in lakhs)	Received (in lakhs)
Major projects	2014-2016	MNRE	34.00	15.14
	2014-2017	DST -WOS A	21.45	8.99
		AICTE		0.63
Minor Projects				
Interdisciplinary Projects				
Industry sponsored				
Projects sponsored by the University/ College	2014-2015	SSN Trust	7.75	1.28
Students research projects	2014-2015	SSN Trust	3.10	2.61
Any other(Specify)		_		
Total			66.30	28.65

ECE					
	Nature of the Project	Duration Year	Name of the funding Agency	Total grant Sanctioned (in lakhs)	Received (in lakhs)
	Maiananaianta		MCIT		20.21
	Major projects		DRDO		3.00
	Minor Projects	2014-2015	Linton University, Malaysia	4.39	4.32
	Interdisciplinary Projects				
	Industry sponsored				
	Projects sponsored by the University/ College	2014-2015	SSN Trust	9.50	3.61
	Students research projects)	2014-2015	SSN Trust	2.34	1.91
	Any other(Specify)				
	Total			16.23	33.05

CSE

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	2014-2015	SSN Trust	1.80	

Students research projects	2014-2015	SSN Trust	1.48	1.39
Any other(Specify)				
Total			3.28	1.39

IT

Nature of the Project	Duration Year	Name of the funding Agency	Total grant Sanctioned (in Lakhs)	Received (in Lakhs)
		DIT, MCIT		6.00
Minor Projects				
Interdisciplinary Projects				
Industry sponsored				
Projects sponsored by the University/ College	2014-2015	SSN Trust	12.30	2.07
Students research projects	2014-2015	SSN Trust	1.09	0.82
Any other(Specify)			_	
Total			13.39	8.89

Chemical

Nature of the Project	Duration Year	Name of the funding Agency	Total grant Sanctioned (in lakhs)	Received (in lakhs)
Major projects				
Minor Projects	2014-2015	Chellammal Agro Project, Chennai	0.25	0.25
Interdisciplinary Projects				
Industry sponsored				
Projects sponsored by the University/ College	2014-2015	SSN Trust	5.50	5.11
Students research projects	2014-2015	SSN Trust	2.40	2.08
Any other(Specify)				
Total			8.15	7.44

BME

Nature of the Project	Duration Year	Name of the funding Agency	Total grant Sanctioned (in Lakh)	Received (in Lakh)
Major projects				
Minor Projects	2014-15	HCL	1.50	1.50
Interdisciplinary Projects				
Industry sponsored				
Projects sponsored by the University/ College	2014-15	SSN Trust	2.50	3.51
Students research projects	2014-2015	SSN Trust	0.98	0.62
Any other(Specify)				_
Total			4.98	5.63

Mechanical

Nature of the Project	Duration Year	Name of the funding Agency	Total grant Sanctioned (in lakhs)	Received (in lakhs)
Major projects	2014-17	AICTE – RPS and MODROBS	15.35	
Minor Projects				
Interdisciplinary Projects				
Industry sponsored				
Projects sponsored by the College	2014-16	SSN Trust	13.1	6.85
Students research projects	2014-15	SSN Trust	2.07	1.54
Any other(Specify)				
Total			30.52	8.39

Civil

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	2014-16	SSN Trust	7.75	3.95
Students research projects	2014-15	SSN Trust	1.25	0.73
Any other(Specify)				
Total			9.00	4.68

S&H

Nature of the Project	Duration Year	Name of the funding Agency	Total grant Sanctioned (in lakhs)	Received (in lakhs)
Major projects	2013-2015	AERB	5.81	5.42
Major projects	2014-2017	DST-SERB	10.14	6.00
Minor Projects				
Interdisciplinary Projects				
Industry sponsored				
Projects sponsored by the University/ College	2014-15	SSN Trust	9.20	3.28
Students research projects				
Any other(Specify)				
Total			25.15	14.70

3.7 No. of books published	i) With ISBN No.	8	Chapters in Edited Books	0
	ii) Without ISBN No.	0		

o. of University Departm	nents receiving	tui	nds from			
UC	GC-SAP -]	CAS	-	DST-FIS	ST
DI	PE -		L		DBT Sci	neme/funds
r colleges Au	itonomy -]	СРЕ [-	DBT Sta	ır Scheme
INSPIRE 1 CE -			-	Any Oth	er (specify)	
evenue generated throu	gh consultancy	7	Rs. 2,66,8	25		
No. of conferences organ	nized by the Ins	stit	ution			
Level	Internationa	1	National	State	University	College
	Internationa	.1		State	Ciliversity	Conege
		+				
Spensoring agencies			551, 11050			
Level	International	1	National	State	Universit	y College
Number			1			
Sponsoring agencies			SSN Trust			
		-		L		
	International	l	National	State	Universit	y College
			1			
Sponsoring agencies			SSN Trust			
	_					
	International	l	National	State	Universit	y College
			1			
Sponsoring agencies			SSN Trust			
ical	_					
Level	International	l	National	State	Universit	y College
Number			4			
Sponsoring agencies			SSN Trust			
	1	ı		I		
Level	Internation	nal	National	State	University	College
Number	1					
Sponsoring agencies	s SSN Trus	st				
	r colleges Au IN evenue generated throu No. of conferences organ Level Number Sponsoring agencies Level Number Sponsoring agencies	UGC-SAP - DPE - Trolleges Autonomy - INSPIRE 1 evenue generated through consultancy No. of conferences organized by the In Level International Number Sponsoring agencies ical Level International Number Sponsoring agencies Level International Number Sponsoring agencies	UGC-SAP - DPE - DPE - DPE - DPE - DPE - INSPIRE 1 evenue generated through consultancy No. of conferences organized by the Institution of Conferences org	r colleges Autonomy - CPE INSPIRE 1 CE evenue generated through consultancy No. of conferences organized by the Institution Level International National Number I Sponsoring agencies SSN Trust Level International National Number I Sponsoring agencies SSN Trust Level International National Number I Sponsoring agencies SSN Trust Level International National Number I Sponsoring agencies SSN Trust Level International National Number I Sponsoring agencies SSN Trust Level International National Number I Sponsoring agencies SSN Trust ical Level International National Number Sponsoring agencies SSN Trust Level International National Number I Sponsoring agencies SSN Trust Level International National Number I Sponsoring agencies SSN Trust	UGC-SAP - CAS - DPE - INSPIRE 1 CE - INSPIRE 1 CE - INSPIRE 1 CE - C	UGC-SAP - CAS - DST-FIS DPE - DBT Sci r colleges Autonomy - CPE - DBT Sta INSPIRE 1 CE - Any Oth evenue generated through consultancy Rs. 2,66,825 No. of conferences organized by the Institution Level International National State University Number 1 Sponsoring agencies SSN Trust Level International National State University Number 1 Sponsoring agencies SSN Trust Level International National State University Number 1 Sponsoring agencies SSN Trust Level International National State University Number 1 Sponsoring agencies SSN Trust Level International National State University Number 1 Sponsoring agencies SSN Trust Level International National State University Number 4 Sponsoring agencies SSN Trust Level International National State University Number 4 Sponsoring agencies SSN Trust Level International National State University Number 4 Sponsoring agencies SSN Trust

Mechanical

Level	International	National	State	University	College
Number	1				
Sponsoring agencies	DST,SERB,CTS and TVS				

Civil

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

Maths

Level	International	National	State	University	College
Number	1				
Sponsoring agencies					
	DST,NBHM				

Chemistry

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

3.12 No. of faculty serv	ed as experts, chairpersons or res	ource persons 1	
3.13 No. of collaboration	ns International 5	National 25	Any other 2
3.14 No. of linkages cre	ated during this year 13		
3.15 Total budget for re	search for current year in lakhs:		
From Funding agency [Rs.184 Lakh From Manage	ement of University/Colle	ge Rs.646 Lakh
Total	Rs. 830 Lakh		

3.16 No. of patents received this year

Type of Patent		Number
National	Applied	4
INational	Granted	-
International	Applied	
International	Granted	-
Commercialised	Applied	
Commerciansed	Granted	-

 $3.17~\mathrm{No.}$ of research awards / recognitions received by faculty and research fellows of the institute in the year

Total	International	National State		University	Dist	College
42	6	24	0	0	0	12

	42	6	24	0	0	0	12			
3.18 No. of fact who are Ph. and students	D. Gui			94						
3.19 No. of Ph.	D. awar	ded by faculty	from the In	stitutio	n 27					
3.20 No. of Res	search so	cholars receivin	g the Fello	wships	(Newly enro	olled + e	xisting on	es)		
JRF 35 SRF 2 Project Fellows 12 Any other 1										
3.21 No. of stud	dents Pa	rticipated in NS	SS events:							
				Unive	ersity level	409	State lev	rel	362	
				Natio	onal level	41	Internati	onal level	0	
3.22 No. of stud	dents pa	rticipated in NO	CC events:	Not Ap	plicable					
				Univ	ersity level	-	State le	vel	-	
3.21 No. of stud	dents Pa	rticipated in NS	SS events:							
				Unive	ersity level	15	State lev	rel	3	
				Natio	onal level	-	Internati	onal level	-	
3.22 No. of stu	dents pa	articipated in N	CC events:							
				Univ	ersity level	-	State le	vel	-	
				Natio	onal level	-	Internat	ional level	-	
3.23 No. of Av	vards w	on in NSS:								
				Unive	ersity level	0	State lev	rel	0	
				Natio	onal level	0	Internati	onal level	0	
3.24 No. of Av	vards w	on in NCC:								
				Unive	ersity level	-	State lev	rel	-	
				Natio	onal level		Internati	onal level	_	

3.25 No. of Extension activities organized

University forum	-	College forum	-		
NCC	-	NSS	22	Any other	-

3.26 Major Activities during the year in the sphere of extension activities and Institutional Social Responsibility

- 1. Campus Clean Up to create awareness on proper collection of garbage which will aid proper disposal.(15 July,2014)
- 2. Blood Donation Camp in association with Association of Voluntary Blood Donors, Tamilnadu (1 August, 2014)
- 3. Thyroid screening camp (2 August, 2014)
- 4. Stem Cell donation organized with Datri (25 September, 2014)
- 5. In association with Ekam (NGO) Cleaned Up both in-patient and out-patient wards of Child Hospital, Egmore as part of Joy of Giving week (6 October, 2014)
- 6. Annual three day village camp at Alathur (4-6 February, 2015)
- 7. Campus Clean Up (31 March, 2015)
- 8. Visited an orphanage, Arul Illam near Kolapakkam and donated the inmates of the orphanage with the dresses, stationary items and food materials. (25 April, 2015)
- 9. Visited Arul Illam and taught subjects like Science and Mathematics to the 10th standard students of the orphanage (13 April, 2015).
- 10. Visit to Goonj (NGO) as part of Joy of Giving Week.

Criterion - IV

4. Infrastructure and Learning Resources

4.1 Details of increase in infrastructure facilities:

Facilities	Existing	Newly	Source of	Total
		created	Fund	
Campus area (Built-up in Sq.m.)	148326	8681	SSN Trust	157007
Class rooms (in Sq.m.)	9322	720	SSN Trust	10042
	(108 Nos.)	(6 Nos.)		(114 Nos.)
Laboratories (in Sq.m.)	17796	150	SSN Trust	17946
	(88 Nos.)	(2 Nos.)		(90 Nos.)
Seminar Halls (in Sq.m.)	4991	175	SSN Trust	5166
	(15 Nos.)	(1 No.)		(16 Nos.)
No. of important equipments purchased	2143	248	SSN Trust	2391
$(\geq 1-0 \text{ lakh})$ during the current year.				
Value of the equipment purchased	1473	285.85	SSN Trust	1759.71
during the year (Rs. in Lakhs)				

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	56416	21,589,971	4937	2,316,193	61353	23,906,164	
Reference Books	2772	7,385,094	109	637,409	2881	8,022,503	
e-Books	363	141,484	278	11,266	641	152,750	
Journals	210	2,700,000	35	300,000	245	3,000,000	
e-Journals	4716	3,926,265	936	364,617	5652	4,290,882	
Digital Database	9	4,067,749	1	375,883	10	4,443,632	
CD & Video	397	197,589	-	-	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	Computer Labs	Internet	Browsing Centres	Computer Centres	Office	Depart -ments	Others
Existing	2124	1596	25+45 Mbps	-	24	54	450	-
Added	60	46	130+110 Mbps	-	-	2	12	-
Total	2184	1642	155+155 Mbps	-	24	56	462	-

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

i) ICT	Rs. 53 Lakh
ii) Campus Infrastructure and facilities	Rs 529 Lakh
iii) Equipments	Rs. 39 Lakh
iv) Others	Rs. 30 Lakh

Total: Rs. 651 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 Efforts made by the institution for tracking the progression
 - 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
3594	656	320	-

(b) No. of students outside the state

158

(c) No. of international students

4

	No	%
Men	2492	59

Women

No	%
1878	41

Last Year					This Year						
General	SC	ST	OBC	Physically Challenged	Total	General	SC	ST	OBC	Physically Challenged	Total
1270	425	19	2325	4	4043	1286	459	16	2485	4	4250

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

5.5 No. of students qualified in these examinations

NET	1	SET/SLET	1	GATE	22	CAT	1
IAS/IPS etc	-	State PSC	-	UPSC	1	Others	35

5.6 Details of student counselling and career guidance

1. Individual counselling: 54 students

2. Psycho educational programs: 3 programs * 450 students

No. of students benefitted 504

5.7 Details of campus placement

	On a	campus		Off Campus
S. No.	Number of Organizations	Number of Students	Number of	Number of
	Visited	Participated	Students Placed	Students Placed
1	Amazon.com	353	1	
2	Zoho Corporation	611	18	
3	Mu Sigma	597	57	
4	Vembu Technology	355	1	
5	Ascendant Technology	281	4	
6	L&T ECC Division	107	12	
7	Success Factors	211	3	
8	Latent View Analytical	552	15	
9	Lister Technology	177	4	
10	Fidelity India, Bangalore	128	12	
11	ITC Paper Board Division	99	4	
12	Polaris FT	194	32	
13	Thoughtworks Technology	278	3	
14	Accenture Technology	552	310	
15	Cognizant Technology	821	350	
16	Infosys Technology	410	342	
17	Wipro Technology	377	136	
18	Bosch Ltd	115	25	
19	Multicoreware Technology	20	2	
20	Temenos	46	5	
21	Infotrellis	105	3	
22	TATA Communications	67	2	
23	L&T Infotech Ltd	199	15	
24	Tech Mahendra Ltd	100	8	
25	Verizon	117	4	
26	Prodapt Solutions Ltd	87	6	

27	Excellacom	4	2	
28	Thorogood, Banglore.	158	1	
29	Fuji Xerox, Japan.	33	1	
30	HP R&D, Banglore.	112	3	
31	Intergraph, Hyderabad.	46	3	
32	Sundaram Fasteners	100	6	
33	Sanmar Engineering Division	63	1	
34	Sanmar Chemplast	63	1	
35	Wipro Global Infrastructure	2	2	
33	Services Services	2	2	
36	Saint-Gobain India, Chennai.	11	2	
37	BA Continuum India	83	8	
38	Ford Technologies Service	139	6	
36	India.	139	U	
39	Ford Motors	85	3	
40	Caterpillar India Pvt. Ltd.	1	1	
41	Computer Science	46	2	
40	Corporation Ltd	1.1		
42	Mobius Knowledge Services	11	3	
43	Evive Software Pvt. Ltd.	155	1	
44	HCL Technologies Ltd.	51	2	
45	Petrofac Engineering Services	41	2	
	India Pvt. Ltd.			
46	Astra Zeneca	91	7	
47	Ashok Leyland Ltd.	57	8	
48	Microchip India	119	2	
49	TATA Elxsi	68	6	
50	Global Analytics	238	7	
51	GlobalSoft Solutions	24	1	
52	ideas2it Technologies Pvt.	117	1	
	Ltd.			
53	Technip	14	2	
54	Flextronics	10	4	
55	Rane Groups, Chennai.	45	4	
56	Shriram Transport & Finance	4	2	
	Ltd.			
57	Karya Technology India Pvt.	19	1	
	Ltd.			
58	Oracle India Pvt. Ltd,	30	2	
	Hyderabad.			
59	Visa Inc, Bangalore.	7	3	
60	Flipkart Internet Pvt. Ltd.	2	2	
61	Manali Petro Chemicals Ltd.	20	3	
62	Fesh Desk	149	6	
63	Enmas GB Power Systems	6	1	
	Project Ltd.			

64	Symantec Software and	4	1	
	Services India Pvt Ltd,			
65	SAP Labs India Ltd,	22	1	
	Bangalore.			
66	Hyundai Motor India Ltd.	4	1	
67	TransSys Solutions Pvt. Ltd.	1	1	
68	Sunoida Solutions Pvt. Ltd.	2	2	
69	Aditya Birla Insurance	11	1	
	Brokers			
70	Amul	4	1	
71	Audi Cars	19	1	
72	Axis Bank	33	12	
73	Bhartiya Fashions	18	1	
74	BNP Paribas	8	2	
75	Cerebrus Consultants	23	2	
76	Credit Mantri	9	3	
77	CTS	6	1	
78	Dell	8	1	
79	GRE Edge	34	3	
80	HCL Infosystems	43	3	
81	HCL Te ch	33	6	
82	HDFC Mutual Fund	20	2	
83	Hexaware Technologies	33	5	
84	Hitachi	13	1	
85	ICICI Securities	14	1	
86	Idea Cellular	38	1	
87	Indusind Bank	15	1	
88	ING Vysya Bank	38	2	
89	ITC Ltd.	18	3	
90	Janalakshmi Finance	12	5	
91	Kotak Mahindra Bank	13	1	
92	Magicbricks.com	7	1	
93	Preethi Kitchen	13	1	
94	Reliance Com	8	1	
95	Sensiple Software	27	4	
96	Smartmegh Consultants	60	9	
97	SRF	10	1	
98	TCS	51	5	
99	Titan	12	1	
100	Turbo Energy	6	1	
101	Vodafone	14	1	

5.8 Details of gender sensitization programmes

Lectures were arranged on importance of women education and corresponding increase in socio-economic equality

5.9.1	No. of students participat	ed in Spo	orts, Games and	other event	E.S.	
	State/ University level	113	National level	52	International level	10
	No. of students participat	ted in cult	tural events			
	State/ University level		National level	500	International level	-
5.9.2	No. of medals /awards w	on by stu	dents in Sports,	Games and	other events	
Sports	: State/ University level	57	National level	36	International level	-
Cultura	l: State/ University level	-	National level	58	International level	-
5.10 Schol	arships and Financial Supp	port				
			Nu	ımber of st	udents Amount Lak	
	Financial support from in	stitution		572	353	3
	Financial support from go	vernmen	t	499	45	
	Financial support from of	her sourc	es	-	-	
	Number of students International/ National red		received s	-	-	
5.11 Stud	dent organised / initiatives					
Fairs	: State/ University level [-	National level	-	International level	-
Exhibition	: State/ University level	8	National level	10	International level	1
5.12 No.	of social initiatives undert	taken by t	the students	6		
5.13 Major	r grievances of students (if	any) red	ressed: No major	r grievance	es S	

5.9 Students Activities

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. SSNCE faculty actively involve in the 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
- Sponsorship for upgrading educational qualifications

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

6.5 Total corpus fund generated	:	NIL			
6.6 Whether annual financial audit l	nas been done	Yes	✓	No	-
			_		

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

Audit Type	External		Inter	rnal
	Yes/No	Agency	Yes/No	Authority
Academic	Yes	TUVNORD	Yes	QMG
Administrative	Yes	TUVNORD	Yes	QMG

6.8 Does the University/ Autonomous College declared	s resu	ılts wit	hin 30) days?
For UG Programmes	Yes	-	No	✓
For PG Programmes	Yes [-	No	√

6.9 W	hat efforts are made by the University/ Autonomous College f	or Examination Reforms?
	Not Applicable	

6.10 What efforts are made by the University to promote autonomy in the affiliated/constituent colleges?

Not Applicable		

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	Contribution to environmental awareness / protect	etion			
	Green and clean environment is imbibed in every activity of SSN. Environmental protection is a cultural aspect of SSN				
7.5	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 start-ups 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

Dr. S. Salivahanan

S. Salind

Signature of the Chairman, IQAC