Sri Sivasubramaniya Nadar College of Engineering

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



Annual Quality Assurance Report (AQAR) of the IQAC for 2015 - 16

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 2015 - 16

PART - A

AQAR for the year

2015 - 16

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. MH) OR	(COGN 18879) TNCOGN14229
1.4 NAAC Executive Committee It (For Example EC/32/A&A/143 This EC no. is available in the of your institution's Accreditat	3 dated 3-5-2004. right corner- bottom
1.5 Website address: www	v.ssn.edu.in
Web-link of the AQA	http://www.ssn.edu.in/wp-content/uploads/2016/03/AQAR 2015-16.pdf
1.6 Accreditation Details	

Cl. No.	Cyala	Grada	CGPA	Year of	Validity
Sl. No.	Cycle	Grade	CGFA	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 Establishment 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 🗌
Constituent College	Yes No
Autonomous college of UGC	Yes No
Regulatory Agency approved Institution (AICTE)	itution 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-ai	d + Self Financing Totally Self-financing
1.10 Type of Faculty/Programme	
Arts Science	Commerce Law PEI (Phys Edu)
TEI (Edu) Engineering	g 🗸 Health Science Management 🗸
Others (Specify)	
1.11 Name of the Affiliating Univers	ity (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** UGC-CE **DST Star Scheme** UGC-Special Assistance Programme **DST-FIST** UGC-Innovative PG programmes Any other (Specify) **UGC-COP Programmes** 2. IQAC Composition and Activities 9 2.1 No. of Teachers 5 2.2 No. of Administrative/Technical staff 2.3 No. of students 2.4 No. of Management representative 1 2.5 No. of Alumni 2 2. 6 No. of any other stakeholder and 1 community representatives (parent) 2.7 No. of Employers / Industrialists 1 1 2.8 No. of other External Experts 2.9 Total No. of members 22 2.10 No. of IQAC meetings held 1

2.11 No. of meetings with various stakeholders: No. 1 Faculty								
Non-Teaching Staff ✓ Students ✓ Alumni ✓ Others								
2.12 Has IQAC received any funding from UGC during the year? Yes No								
If yes, mention the amount								
2.13 Seminars and Conferences (only quality related)								
(i) No. of Seminars/Conferences/ Workshops/Symposia organized by the IQAC								
Total Nos. International National State 1 Institution Level 1								
 Guest lecture on "Be the change" by writer Thiru. Samas. Special lecture on "Building a Bright Future" by Shri B.S. Raghavan, IAS (Retired) 								
2.14 Significant Activities and contributions made by IQAC								
 Regular internal audits (twice in a year) ISO 9001:2015 Quality standards awareness programmes 								
2.15 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 with								
ISO 9002:2015 Standards Standards implementation was successfully completed								
implementation Quality Management Group Awareness program is conducted on internal audit on ISO 9001:2015								
2.15 Whether the AQAR was placed in statutory body Management Syndicate Any other body Provide the details of the action taken								
AQAR report for 2015-16 was placed in the Governing Council meeting and approved.								

PART – B

Criterion - I

I. Curricular Aspects

1.1 Details about Academic Programmes

1.1 Details about Acad	iemic Programi	nes				
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	12	-	12			
UG	8	-	8	-		
PG Diploma	-	-	-	-		
Advanced Diploma	-	-	-	-		
Diploma	-	-	-	-		
Certificate	1	-	1	-		
Others	-	-	-	-		
Total	31	-	31			
Interdisciplinary			_	_		
,	-	-	-	-		
Innovative	-	-	-	-		
(ii) Pattern of programmes: Pattern Number of programmes						
Seme	ester A	ll UG and PG programm	mes are of Semeste	er pattern		
Trim	ester		-			
Ann	ual		-			
.3 Feedback from stakeholders Alumni Parents Femployers Students (On all aspects)						
Mode of feedba	ick : Onl	ine / Manual	✓ Co-operating	g schools (for PEI)		
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						
5 Any new Department/Centre introduced during the year. If yes, give details.						
	No					

Criterion - II

2. Teaching, Learning and Evaluation

2.1 Total No. of permanent faculty

Total	Asst. Professors	Associate Professors	Professors	Others
274	123	102	49	-

2.2 No. of permanent faculty with Ph.D.

178

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
9	6	2	4	1	2	-	-	12	12

2.4 No. of Guest and Visiting faculty and Temporary faculty

9

2.5 Faculty participation in conferences and symposia:

No. of Faculty	International level	National level	State level
Attended	130	92	33
Presented papers	159	49	6
Resource Persons	47	45	21

- 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

27

2.10 Average percentage of attendance of students

87.75

2.11 Course/Programme wise distribution of pass percentage :

Title of the Programme	Total no. of students	Division					
	appeared	Distinction %	I %	II %	III %	Pass %	
B.E. (EEE)	147	14.3	71.4	3.4	-	89.11	
B.E. (ECE)	147	25.2	63.9	3.4	-	92.50	
B.E. (CSE)	149	15.4	66.4	7.4	-	89.26	
B. Tech. (IT)	141	14.2	73.0	5.0	-	92.19	
B.Tech- (Chemical)	67	31.8	65.1	Nil	-	96.00	
B.E. (BME)	67	8.9	77.61	8.9	-	95.52	
B.E. (Mechanical)	149	18.8	75.2	4.0	-	97.98	
B.E. (Civil)	71	5.6	84.5	4.2	-	94.36	
M.E. (PED)	16	18.75	75	-	-	93.75	
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)	34	5.9	88.2	_	-	94.11	
M.E. (S/W Engg.)	12	Nil	91.7	8.3	-	100	
M.Tech. (IT)	14	14.3	71.4	_	-	85.71	
M.Tech. (Envi. Sci.	12	58.3	41.7	-	-	100	
& Tech.)							
M.E. (Med. Electr.)	11	9.1	81.8	9.1	-	100	
M.E. (Mfg. Engg.)	17	11.76	85.29	_	-	97.06	
M.E. (Energy)	17	11.76	85.29	-	-	97.06	
MBA	106	1	91.51	6.59	-	99.1	

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 each of 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, and 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	4
HRD programmes	-
Orientation programmes	4
Faculty exchange programme	-
Staff training conducted by the university	12
Staff training conducted by other institutions	8
Summer / Winter schools, Workshops, etc.	251
Others	-

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	63	-	-	-
Technical Staff	71	-	2	-

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. In 2015-16 over 313 students published 188 papers 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	13	17	19	63
Outlay in Rs. Lakhs	131.73	354.62	396.6	1843.30

3.3 Details regarding minor projects

	Completed	Ongoing	Sanctioned	Submitted
Number	7	9	43	52
Outlay in Rs. Lakhs	7.65	25.75	18.24	22.25

3.4 Details on research publications

	International	National	Others
Peer Review Journals	483	11	-
Non-Peer Review Journals	57	2	-
e-Journals	6	-	-
Conference proceedings	304	19	-

3.5 Details on Impact factor of publications:

Range	Upto 5.9	Average	0.3	h-index	30	Nos. in SCOPUS	370	1
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3.6 Research funds sanctioned and received from various funding agencies, industry and other organisations

EEE

Nature of the Project	Duration Year	Name of the funding Agency	Total grant Sanctioned (in lakhs)	Received (in lakhs)
	2015-2018	DST-SERB	22.90	20.10
Major projects	2015-2016	DST-SERB	45.00	
		MNRE		8.98
		DST-WOS A		6.04
Minor Projects	2015-2016	Horizon solutions ltd	1.00	1.00
Interdisciplinary Projects				
Industry sponsored				
Projects sponsored by the University/ College	2015-2016	SSN Trust	6.85	5.60
Students research projects	2015-2016	SSN Trust	4.75	4.50
Any other(Specify)				
Total		_	80.50	46.22

ECE

Nature of the Project	Duration Year	Name of the funding Agency	Total grant Sanctioned (in lakhs)	Received (in lakhs)
Major projects	2015-16	Tamil Virtual Academy	9.52	2.84
		MCIT		11.60
Minor Projects				
Interdisciplinary Projects				
Industry sponsored				
Projects sponsored by the University/ College	2015-16	SSN Trust	5.65	3.98
Students research projects (other than compulsory by the University)	2015-16	SSN Trust	3.64	1.28
Any other(Specify)				
Total			18.81	19.70

CSE

Nature of the Project	Duration Year	Name of the funding Agency	Total grant Sanctioned (in lakhs)	Received (in lakhs)
Major projects	2015-2018	DST, Tamil Virtual Academy	25.62	25.62
Minor Projects	2015-2016	nVIDIA – 3 GPU, Global health city	4.9	4.9
Interdisciplinary Projects				
Industry sponsored				

Projects sponsored by the University/ College	2015-2017	SSN Trust	6.00	0.12
Students research projects	2015-2016	SSN Trust	2.72	2.21
Any other(Specify)				
Total			39.24	32.85

IT

Nature of the Project	Duration Year	Name of the funding Agency	Total grant Sanctioned (in Lakhs)	Received (in Lakhs)
		DIT, MCIT		5.60
Major projects	2016-2017	Tamil Virtual Academy	9.52	5.13
Minor Projects				
Interdisciplinary Projects				
Industry sponsored				
Projects sponsored by the University/ College	2015-2016	SSN Trust	7.55	3.23
Students research projects	2015-2016	SSN Trust	2.32	1.18
Any other(Specify)				
Total			19.39	15.14

Chemical

Nature of the Project	Duration Year	Name of the funding Agency	Total grant Sanctioned (in lakhs)	Received (in lakhs)
Major projects	2015-17	DST-SERB	19.47	
Minor Projects				
Interdisciplinary Projects				
Industry sponsored				
Projects sponsored by the University/ College	2015-2016	SSN Trust	4.00	2.10
Students research projects	2015-2016	SSN Trust	4.34	2.21
Any other(Specify)		_		
Total			27.81	4.31

BME

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	2015-16	SSN Trust	10.00	7.53
Students research projects	2015-17	SSN Trust	1.73	0.94

Any other(Specify)			
Total		11.73	8.47

Mechanical

Nature of the Project	Duration Year	Name of the funding Agency	Total grant Sanctioned (in lakhs)	Received (in lakhs)
Major projects	2015-18	DST	160.92	
Minor Projects	2015-17	Institution of Engineers	1.03	
Interdisciplinary Projects				
Industry sponsored				
Projects sponsored by the University/ College	2015-17	SSN Trust	8.25	7.85
Students research projects	2015-16	SSN Trust	4.68	3.20
Any other(Specify)				
Total			174.88	11.03

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	2015-16	SSN Trust	2.2	1.02
Students research projects	2015-16	SSN Trust	2.38	1.79
Any other(Specify)		_		_
Total			4.58	2.81

S&H

Nature of the Project	Duration Year	Name of the funding Agency	Total grant Sanctioned (in lakhs)	Received (in lakhs)
Major projects		DST		6.00
	2015-2018	DST-WOSA	13.91	5.05
Minor Projects				
Interdisciplinary Projects				
Industry sponsored				
Projects sponsored by the University/ College	2015-2016	SSN Trust	15.40	11.36
Students research projects				
Any other(Specify)				
Total			29.31	22.41

3.7 No. of boo	oks published	i) With ISI	BN No.	24	Cl	hapters in	Edited Bo	ooks 8	
3.8 No. of Un	iversity Depart	ii) Without ments recei			•			_	
	Į	JGC-SAP	-	CAS	-] [ST-FIST		1
	r	DE [DT Cala		_
	L)PE	-			L	OBT Schei	me/funds	
3.9 For colleg	ges A	autonomy	-	СРЕ	-		OBT Star S	Scheme	-
	II	NSPIRE [1	CE	-	$\overline{}$ A	Any Other	(specify)	<u>-</u>
		L				_		L	
3.10 Revenue	generated thro	ugh consult	ancy	Rs. 22.0	3 L	akh			
	C	C	J						
3.11 No. of c	onferences orga	anized by th	ne Institu	tion					
EEE									
Level	International	National	State	University	C	College			
Number	1								
Sponsoring	SSN Trust,								
agencies	CTS, OHM								
ECE									
Level	International					Nationa	l State	University	College
Number	1					1			
Sponsoring	ISRO, DRDO	O, IEEE, TC	S, Cogniz	ant, APCER,		SSN			
agencies	mGage, Elmac	k, SSN Tru	st			Trust			
CSE									
Level	International	National	State	University	(College			
Number	International	1	State	University		onege			
Sponsoring		SSN			-				
agencies		Trust							
agencies		Trust							
Chemical									
Level	International	National	State	University	C	College			
Number		3							
Sponsoring		SSN							

Trust

agencies

BME

Level	International	National	State	University	College
Number	0	1	0	0	0
Sponsoring		ICMR			
agencies					

Mechanical

Level	International	National	State	University	College
Number	1	2			
Sponsoring	SSN Trust	SSN			
agencies		Trust			

English

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

Physics

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

Chemistry

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

3.12 No. of faculty served as experts,	chairpersons or	resour	ce persons			
•			-	114		
3.13 No. of collaborations	International	9	National	20	Any other	-
3.14 No. of linkages created during th	is year 7					

3.15 Total budget for research for current year in lakhs :

From Funding agency	Rs.526 Lakh	From Management of University/College	Rs. 398 Lakh
Total	Rs 924 Lakh		

3.16 No. of patents received this year

Type of Patent		Number
National	Applied	13
Ivational	Granted	-
International	Applied	-
International	Granted	-
Camananaialiaad	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
36	6	20	0	4	0	6

- 3.18 No. of faculty from the Institution 126 who are Ph. D. Guides and students registered under them 352
- 3.19 No. of Ph.D. awarded by Anna University faculty from the Institution 26

3.20 No. of Research scholars receiving the Fello	owships (Newly enro	olled + e	existing ones)	
JRF 50 SRF 2	Project Fellows	19	Any other	1
3.21 No. of students Participated in NSS events:				
	University level	552	State level	840
	National level	12	International level	45
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	6	State level	
	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 Any other 19

- 3.26 Major Activities during the year in the sphere of extension activities and Institutional Social Responsibility
 - 1. Campus Clean Up activity, organized by SSN YRC on 1 April, 2016
 - 2. Blood Donation Camp was organized in association with Madras Voluntary Blood donors Association on 26 February 2016
 - 3. Organ Donation Camp organized in association with Dathri Association on 17 February 2016
 - 4. Orphanage visit to 'Arul Illam' on 07.02.2016
 - 5. Study camp by 'Dathri Foundation' on 'Human values' on 23.01.2016

- 6. Orphanage visit to 'Arul Illam' on 02.10.2015
- 7. Campus Clean Up activity, organized by SSN YRC on 11 September, 2015
- 8. Blood Donation Camp organized in association with Madras Voluntary Blood donors Association during 1 August, 2015.

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.)	157007	12828	SSN Trust	169835
Class rooms (in Sq.m.)	10042 (114 Nos.)	-	SSN Trust	10042 (114 Nos.)
Laboratories (in Sq.m.)	17946 (90 Nos.)	-	SSN Trust	17946 (90 Nos.)
Seminar Halls (in Sq.m.)	5166 (16 Nos.)	-	SSN Trust	5166 (16 Nos.)
No. of important equipments purchased (≥ 1-0 lakh) during the current year.	2391	223	SSN Trust	2614
Value of the equipment purchased during the year (Rs. in Lakhs)	1759.71	250.90	SSN Trust	2010.61

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		Newl	Newly added		Total	
	No.	Value in Rs.	No.	Value in Rs.	No.	Value in Rs.	
Text Books	61353	23,906,164	5609	2,593,284	66962	26,499,448	
Reference Books	2881	8,022,503	238	1,340,051	3119	9,362,554	
e-Books	641	152,750	-	-	641	171,157	
Journals	245	3,000,000	-	-	245	3,729,918	
e-Journals	5652	4,290,882	-	-	5652	4,762,573	
Digital Database	10	4,443,632	-	-	10	4,933,730	
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	271620	-	-	854	271620	

4.4 Technology up gradation (overall)

	Total Computers	No. of computers in Labs	Internet	Browsing Centres	No. of Computer Centres	No. of compute rs in Office	No. of compute rs Departments	Oth ers
Existing	2184	1642	155+155 Mbps	-	24	56	462	-
Added	40	26	-	-	-	1	13	-
Total	2224	1668	310 Mbps	-	24	57	475	-

- 4.5 Computer, Internet access, training to teachers and students and any other programme for technology upgradation (Networking, e-Governance etc.)
 - MOOCs 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. 61 Lakh

ii) Campus Infrastructure and facilities Rs. 611 Lakh

iii) Equipments Rs. 54 Lakh

iv) Others Rs. 37 Lakh

Total: Rs. 762 Lakh

Criterion - V

5. Student Support and Progression

- 5.1 Contribution of IQAC in enhancing awareness about Student Support Services
 - 1. IQAC 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
3616	639	378	-

(b) No. of students outside the state

122

(c) No. of international students

17

Men No %
2679 58

Women

No	%
1954	42

Last Year				This Year							
General	SC	ST	OBC	Physically Challenged	Total	General	SC	ST	OBC	Physically Challenged	Total
1286	459	16	2485	4	4250	1301	456	19	2473	6	4255

Demand ratio 1:17

Dropout Less than 2%

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

Placement Training

Career development guidance

Personality Development Programs

Information on competitive examination in the library

No. of students beneficiaries

All students placed

5.5 No. of students qualified in these examinations

NET

-

SET/SLET

-

GATE

8

CAT

3

IAS/IPS etc

-

State PSC

-

UPSC

-

Others

62

5.6 Details of student counselling and career guidance

1. Individual counselling: 54 students

2. Psycho educational program: 1 program

(150 students)

No. of students benefitted

204

5.7 Details of campus placement

On cam	n campus 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. Ltd.	626	18				
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	DELL R&D, Bangalore.	94	6				
13	Lister Technology	218	2				
14	TATA Elxsi, Bangalore.	252	66				
15	Trimble Technology, Chennai.	25	2				
16	Latent View Analytics, Chennai.	421	6				
17	Go Frugal, Chennai.	730	7				
18	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	Cognizant Technology	755	387				
25	L&T ECC, Chennai.	104	9				
26	Wipro Technology	450	204				
27	Accenture Technology	526	183				
28	TATA Consultancy Services	654	170				
29	Robert Bosch, Coimbatore.	122	13				
30	Ashok Leyland Ltd.	83	4				
31	ABB India Ltd, Bangalore.	34	4				
32	Dow Chemicals Ltd, Chennai.	7	2				
33	Fuji Xerox, Japan.	48	2				
34	Sundram Fasteners, Chennai.	64	5				
35	SAP Labs India, Bangalore.	159	5				

26	VI A Tanaan	<u> </u>	1	
36	KLA Tencor	5	1	
37	CherryTin Online Pvt. Ltd.	1	1	
38	McKinsey & Company	1	1	
39	Deloitte Consulting India Pvt. Ltd.	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	Jus Pay	97	2	
46	FL Smidth, Chennai.	73	6	
47	Avnet, Chennai.	129	2	
48	Toshiba Machine Pvt. Ltd., Chennai.	4	3	
49	Alcatel Lucent	87	5	
50	HealthifyMe Wellness Products & Services Pvt. Ltd.	83	4	
51	AstraZeneca, Chennai.	145	6	
52	Huawei Technology India Pvt. Ltd.	71	2	
53	CNS Inc	30	4	
54	Microchip India	45	2	
	Hexagon Capability Center India Pvt.	81	2	
55	Ltd			
56	Software AG Bangalore Technologies Pvt. Ltd	152	2	
57	Penna Cement Ltd	21	1	
	Unitech Transfer GmbH-German	86	6	
58	Centre for Automation and Robotics Germany			
59	Renault Nissan	68	4	
60	Saint Gobain	16	1	
61				
62	Bally Technologies	32	7	
63	The Hindu	13	3	
64	CSS Corporation, Chennai.	27	4	
65	GrundfosX (Off Campus)	1	Т	1
	ZoomRx Healthcare Technology	8		2
66	Solutions Pvt. Ltd. (Off Campus)	U		_
	Perficient India Pvt. Ltd. (Off	1		1
67	Campus)	1		1
68	Aditya Birla Insurance Brokers	1	1	
69	Axis Bank	21	10	
70	Bajaj Corp	8	10	
70	Big Bazaar	13	1	
72	Cerebrus Consultants	14	2	
73		30	4	
	CMA CGM			
74	Colgate	11	6	
75	CTS	12	1	
76	Deloitte	14	4	
77	GSK	23	1	
78	HCL Tech	55	4	
79	Indusind Bank	16	1	
80	ISS	9	1	

81	ITC	11	3	
82	Kent RO	5	1	
83	Kotak Insurance	19	1	
84	Kotak Mahindra	9	2	
85	Payoda Technologies	23	1	
86	RANE	16	2	
87	SBA Info Solutions	4	2	
88	Sensiple Sensiple	27	2	
89	Smartmegh Consultants	22	5	
90	Systwo Analytics	10	$\frac{3}{2}$	
91	Secova	21	3	
92	TCS	50	<u></u>	
93	TCS BPS	15	1	
94	Tube Investments	31	1	
95	Unlimited Innovations	1	1	
96	Zoho Corp	76	1	
97	Aditya Birla Insurance Brokers	1	1	
98	Axis Bank	21	10	
99	Bajaj Corp	8	1	
100	Big Bazaar	13	1	
101	Cerebrus Consultants	14	2	
102	CMA CGM	30	4	
103	Colgate	11	6	
104	CTS	12	1	
105	Deloitte	14	4	
106	GSK	23	1	
107	HCL Tech	55	4	
108	Indusind Bank	16	1	
109	ISS	9	1	
110	ITC	11	3	
111	Kent RO	5	1	
112	Kotak Insurance	19	1	
113	Kotak Mahindra	9	2	
	Payoda Technologies	23	1	
115	RANE	16	2	
116	SBA Info Solutions	4	2	
117	Sensiple	27	2	
118	Smartmegh Consultants	22	5	
119	Systwo Analytics	10	2	
120	Secova	21	3	
121	TCS	50	11	
122	TCS BPS	15	1	
123	Tube Investments	31	1	
123	Unlimited Innovations	1	1	
125	Zoho Corp	76	1	
123	Zono Corp	/0	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 participated in Sports, Games and other events						
	State/ University level 107 National le	evel 52 Inter	rnational level				
	No. of students participated in cultural events	3	_				
	State/ University level National le	evel 520 Inter	national level				
5.9.2	No. of medals /awards won by students in Sp	orts, Games and othe	r events				
Sports	: State/ University level 41 National 1	level 34 Inte	ernational level				
	al: State/University level - National le	evel 61 Inter	rnational level				
		Number of students	Amount in Rs Lakh				
			332				
	Financial support from institution	517	332				
	Financial support from institution Financial support from government	517 447	85.95				
	**						

5.11 Student organised / initiative	s				
Fairs : State/ University level	-	National level	-	International level	-
Exhibition: State/ University level	9	National level	10	International level	1
5.12 No. of social initiatives unde	rtaken by	the students	20		

5.13 Major grievances of students (if any) redressed: No major grievance.

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 advises on 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
- By 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. Advertisements in national news papers
- 2. Through referrals by academic and industry experts

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.

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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 ha	s 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 decl	are resu	ılts wit	thin 30) days	!
	For UG Programmes	Yes	-	No	✓	
	For PG Programmes	Yes	-	No	✓	

6.9 W	hat efforts are made by the University/ Autonomous Colleg	ge for Examination Reforms
	Not Applicable	

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

Not Applicable	
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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
 - Workshops and mentoring

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 th	e
	beginning of the year	

Detailed report is provided Management Review Reports of the individual department

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

Dr. S. Salivahanan

Signature of the Chairman, IQAC