

# **Yearly Status Report - 2018-2019**

Part A		
Data of the Institution		
1. Name of the Institution	SRI SIVASUBRAMANIYA NADAR COLLEGE OF ENGINEERING	
Name of the head of the Institution	Dr. S. Salivahanan	
Designation	Principal	
Does the Institution function from own campus	Yes	
Phone no/Alternate Phone no.	04427469752	
Mobile no.	9444189433	
Registered Email	info@ssn.edu.in	
Alternate Email	salivahanans@ssn.edu.in	
Address	Rajiv Gandhi Salai (OMR), Kalavakkam	
City/Town	Kalavakkam	
State/UT	Tamil Nadu	
Pincode	603110	

Affiliated
Co-education
Rural
private
Dr. G Selvakumar & Dr G Satheesh Kumar
04427469752
9597796353
info@ssn.edu.in
ssniqac@ssn.edu.in
http://www.ssn.edu.in/wp-content/uploads/2016/03/AQAR-2016-17.pdf
Yes
http://www.ssn.edu.in/wp-content/uploads/2018/10/College Calendar 2018 -19.pdf

## 5. Accrediation Details

Cycle	Grade	CGPA	Year of	Vali	dity
			Accrediation	Period From	Period To
1	A	3.13	2011	08-Jan-2011	07-Jan-2016
2	A+	3.55	2017	19-Jul-2017	18-Jul-2022

# 6. Date of Establishment of IQAC 01-Jul-2009

# 7. Internal Quality Assurance System

Quality initiatives by IQAC during the year for promoting quality culture			
Item /Title of the quality initiative by IQAC	Date & Duration	Number of participants/ beneficiaries	

Internal Academic Audit	30-Apr-2019 1	288	
External Academic Audit	30-May-2019 1	26	
submission of Annual Quality Assurance Report (AQAR	30-Dec-2018 60	30	
NIRF 2019 participation	09-Nov-2018 30	30	
ISO certification by TUV NORD	12-Oct-2018 1	270	
Mela'19 - EDC -Lakshya	07-Feb-2019 1	150	
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# 8. Provide the list of Special Status conferred by Central/ State Government-UGC/CSIR/DST/DBT/ICMR/TEQIP/World Bank/CPE of UGC etc.

Institution/Departmen t/Faculty	Scheme	Funding Agency	Year of award with duration	Amount
No Data Entered/Not Applicable!!!				
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9. Whether composition of IQAC as per latest NAAC guidelines:	Yes
Upload latest notification of formation of IQAC	<u>View File</u>
10. Number of IQAC meetings held during the year :	7
The minutes of IQAC meeting and compliances to the decisions have been uploaded on the institutional website	Yes
Upload the minutes of meeting and action taken report	<u>View File</u>
11. Whether IQAC received funding from any of the funding agency to support its activities during the year?	No

#### 12. Significant contributions made by IQAC during the current year(maximum five bullets)

? Participated in NIRF 2019. SSNCE has been ranked 37th in Engineering category (among all Engineering colleges in India) and 78th rank (overall) among all Educational Institutions in India ? Regular internal academic audits: Twice a year ? Regular external academic audits: Once a year ? ISO 9001:2015 Quality audits ? Obtained autonomous status

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# 13. Plan of action chalked out by the IQAC in the beginning of the academic year towards Quality Enhancement and outcome achieved by the end of the academic year

Plan of Action	Achivements/Outcomes	
E - content development	LMS implemented for all the courses.	
ERP software	The ERP software, developed by SSN faculty, is implemented for Autonomous stream.	
NIRF Ranking	SSNCE has been ranked 37th among all Engineering colleges in India by NIRF 2019, MHRD.	
Outcome based Syllabus	Implemented for Autonomous stream.	
NBA accreditation	B.E. (Mechanical) and B.Tech (Chemical Engg) Programmes are applying for renewal of NBA accreditation. The B.E. (Civil Engg.) is preparing SAR for NBA accreditation.	
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# 14. Whether AQAR was placed before statutory body ?

Yes

Name of Statutory Body	Meeting Date
Management	26-Dec-2019
15. Whether NAAC/or any other accredited body(s) visited IQAC or interacted with it to assess the functioning?	Yes
Date of Visit	05-Nov-2019
16. Whether institutional data submitted to AISHE:	Yes
Year of Submission	2019
Date of Submission	31-Jan-2019
17. Does the Institution have Management Information System ?	Yes
If yes, give a brief descripiton and a list of modules currently operational (maximum 500 words)	The Institute has an MIS. The modules currently in operation include the admission application management system, the student on boarding and

information system, Learning Management System among others. The HR modules and Finance modules are currently in the process of implementation.

#### Part B

#### CRITERION I – CURRICULAR ASPECTS

#### 1.1 - Curriculum Planning and Implementation

1.1.1 – Institution has the mechanism for well planned curriculum delivery and documentation. Explain in 500 words

Assessment results reflect on the student's ability to remember and apply course content and related knowledge in a structured manner (set question pattern). It is reviewed by a committee, consisting of HOD and subject experts from the department. The meeting is held regularly after publication of end semester results. The inputs are suitably incorporated in terms of removal of redundancies and additional emphasis on topics of current interest. Faculty who are the members of syllabus revision committee of Anna University will provide these inputs, for revision of the curriculum and syllabus. As part of Autonomy status, SSN was conferred the right to modify its curriculum and syllabus. Each department has its own Board of Studies to advice on curriculum changes. The final approving authority is the Academic Council. Accordingly, the SSN mechanical team worked out a modified syllabus and presented it for approval to the Board of Studies on 06.07.2018. After incorporating the suggestions by the Board of Studies, the improved version was presented to the Academic Council on 13.07.2018. As suggested by the Academic Council, the syllabus and curriculum have been revised and sent for their approval.

#### 1.1.2 - Certificate/ Diploma Courses introduced during the academic year

Certificate	Diploma Courses	Dates of Introduction	Duration	Focus on employ ability/entreprene urship	Skill Development
Post Graduate Program in Business Analytics Data Science	Nil	02/01/2019	180	The program has been designed to meet the industry demand for p rofessionals in business analytics data science to solve the business problem	Analytics

#### 1.2 - Academic Flexibility

1.2.1 – New programmes/courses introduced during the academic year

Programme/Course Programme Specialization		Dates of Introduction
No Data Entered/Not Applicable !!!		

1.2.2 – Programmes in which Choice Based Credit System (CBCS)/Elective course system implemented at the affiliated Colleges (if applicable) during the academic year.

Name of programmes adopting CBCS	Programme Specialization	Date of implementation of CBCS/Elective Course System
BE	Mech, ECE, Civil, CSE, EEE BioMedical Engg.	02/07/2018
BTech	IT,Chemical Engg.	02/07/2018
ME	Communication Systems, Computer Science and Engineering, Applied Electronics, Power Electronics and Drives, VLSI Design, Software Engineering, Energy Engineering, Manufacturing Engineering, Medical Electronics	02/07/2018
Mtech	Environmental Science and Technology & Information Technology	02/07/2018
MBA	MBA	02/07/2018

## 1.2.3 - Students enrolled in Certificate/ Diploma Courses introduced during the year

	Certificate	Diploma Course
Number of Students	49	0

#### 1.3 – Curriculum Enrichment

### 1.3.1 - Value-added courses imparting transferable and life skills offered during the year

Value Added Courses	Date of Introduction	Number of Students Enrolled	
Brainwave Robotics	14/02/2019	30	
Core placement training	18/06/2019	48	
Biomedical Development Club (BDC) - Hands on workshop on Auto desk Fusion 360	22/02/2019	58	
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## 1.3.2 - Field Projects / Internships under taken during the year

Project/Programme Title	Programme Specialization	No. of students enrolled for Field Projects / Internships
BE	Mech, ECE, Civil, CSE,EEE, Bio-Medical Engg.	578
BTech	IT,Chemical Engg.	88
ME	Communication Systems, Computer Science and Engineering, Applied Electronics, Power Electronics and Drives, VLSI Design, Software Engineering, Energy Engineering,	15

	Manufacturing Engineering, Medical Electronics		
MBA	MBA	114	
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#### 1.4 - Feedback System

1.4.1 – Whether structured feedback received from all the stakeholders.

Students	Yes
Teachers	Yes
Employers	Yes
Alumni	Yes
Parents	Yes

1.4.2 – How the feedback obtained is being analyzed and utilized for overall development of the institution? (maximum 500 words)

#### Feedback Obtained

The score obtained in the feedback is taken as a part in the faculty appraisal (the faculty submits appraisal form for each semester). The total score obtained by the faculty for an academic year is taken as a criterion for the award of Best Teacher (Best Teacher Award is given during Teacher's day celebration). The faculty who is scoring less than 60 in student feedback is counselled. Feedback from alumni is collected every year and their suggestions are incorporated in revising Programme Educational Outcome (PEO). Feedbacks from parents are collected periodically about the academic environment, academic standard and overall development and progress of the student. Feedback from recruiters is obtained at the end of their recruitment process. This is used for improving the employability skills of the students.

#### **CRITERION II – TEACHING- LEARNING AND EVALUATION**

#### 2.1 - Student Enrolment and Profile

#### 2.1.1 - Demand Ratio during the year

Name of the Programme	Programme Specialization	Number of seats available	Number of Application received	Students Enrolled
BE	Mech, ECE, Civil, CSE,EEE, Bio-Medical Engg., IT,Chemical Engg.	336	5141	336
ME	Communication Systems, Computer Science and Engineering, Applied Electronics, Power Electronics and Drives, VLSI Design, Software	90	53	53

Engineering, Energy Engineering, Manufacturing Engineering, Medical			
Electronics			
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#### 2.2 - Catering to Student Diversity

2.2.1 - Student - Full time teacher ratio (current year data)

Year	Number of	Number of	Number of	Number of	Number of
	students enrolled	students enrolled	fulltime teachers	fulltime teachers	teachers
	in the institution	in the institution	available in the	available in the	teaching both UG
	(UG)	(PG)	institution	institution	and PG courses
			teaching only UG	teaching only PG	
			courses	courses	
2018	1025	93	237	33	112

#### 2.3 - Teaching - Learning Process

2.3.1 – Percentage of teachers using ICT for effective teaching with Learning Management Systems (LMS), Elearning resources etc. (current year data)

Number of Teachers on Roll	Number of teachers using ICT (LMS, e- Resources)	ICT Toolsand resources available	Number of ICT enabled Classrooms	Numberof smart classrooms	E-resources and techniques used
270	270	7	90	65	6

2.3.2 – Students mentoring system available in the institution? Give details. (maximum 500 words)

Yes. An inhouse fulltime student counsellor is available in the campus. Besides, a group of 14 to 20 students are assigned to a faculty mentor who monitors the progress of the students and offer guidance to the students. The mentor is continuously monitoring the academic, cocurricular and Extracurricular activities of the mentee. If the mentee is struggling, the mentor gives proper counselling. The continuous assessment test reports and attendance particulars are periodically updated to the parents through mentors. The career guidance, elective selections are supported by mentors.

Number of students enrolled in the institution	Number of fulltime teachers	Mentor : Mentee Ratio
4306	270	15.95

#### 2.4 - Teacher Profile and Quality

2.4.1 - Number of full time teachers appointed during the year

No. of sanctioned positions	No. of filled positions	Vacant positions	Positions filled during the current year	No. of faculty with Ph.D
1	1	1	1	1

2.4.2 – Honours and recognition received by teachers (received awards, recognition, fellowships at State, National, International level from Government, recognised bodies during the year)

Year of Award	Name of full time teachers receiving awards from state level, national level, international level	Designation	Name of the award, fellowship, received from Government or recognized bodies		
No Data Entered/Not Applicable !!!					

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#### 2.5 - Evaluation Process and Reforms

2.5.1 – Number of days from the date of semester-end/ year- end examination till the declaration of results during the year

Programme Name	Programme Code	Semester/ year	Last date of the last semester-end/ year- end examination	Date of declaration of results of semester- end/ year- end examination
No Data Entered/Not Applicable !!!				
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2.5.2 - Reforms initiated on Continuous Internal Evaluation(CIE) system at the institutional level (250 words)

Institution conducts three tests per course in a semester. Tests are conducted after four weeks of teaching, during first two periods on Monday and Friday of every week. Marks obtained in the tests and attendance for the assessment period is intimated to the parents directly by post. The question papers are set in line with the level of the course outcomes and the same is marked in the question paper.

2.5.3 – Academic calendar prepared and adhered for conduct of Examination and other related matters (250 words)

The academic calendar is prepared and circulated to the students. The continuous assessment test schedules are given in the calendar and tests are conducted as per the schedule. The calendar circulated to the students can be found in the link given below.

http://www.ssn.edu.in/wpcontent/uploads/2018/10/College\_Calendar\_2018\_19.pdf

#### 2.6 - Student Performance and Learning Outcomes

2.6.1 – Program outcomes, program specific outcomes and course outcomes for all programs offered by the institution are stated and displayed in website of the institution (to provide the weblink)

http://www.ssn.edu.in

2.6.2 - Pass percentage of students

Programme Code	Programme Name	Programme Specialization	Number of students appeared in the final year examination	Number of students passed in final year examination	Pass Percentage
No Data Entered/Not Applicable !!!					
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#### 2.7 - Student Satisfaction Survey

2.7.1 – Student Satisfaction Survey (SSS) on overall institutional performance (Institution may design the questionnaire) (results and details be provided as weblink)

No Data Entered/Not Applicable !!!

#### CRITERION III – RESEARCH, INNOVATIONS AND EXTENSION

#### 3.1 - Resource Mobilization for Research

3.1.1 – Research funds sanctioned and received from various agencies, industry and other organisations

Nature of the Project	Duration	Name of the funding	Total grant	Amount received
		agency	sanctioned	during the year

#### No Data Entered/Not Applicable !!!

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#### 3.2 - Innovation Ecosystem

3.2.1 – Workshops/Seminars Conducted on Intellectual Property Rights (IPR) and Industry-Academia Innovative practices during the year

Title of workshop/seminar	Name of the Dept.	Date
Technical talk on So you want a career in medical devices DD	Biomedical Engineering IEEEEMBS and Healthcare Technology Innovation Centre, IITM	20/02/2019
Training on Ventilators SV900C	Biomedical Engineering and Biovision Medical Vision	23/02/2019
One Day National Workshop on Writing Scientific Research PaperPhase VI	Chemical Engineering	24/08/2019
One Day National Workshop on Writing Scientific Research PaperPhase VII	Chemical Engineering	25/01/2019
Two day National Workshop on, "Modern Power Converters For Renewable Energy Interface" during at SSN College of Engineering, Chennai	EEE	24/01/2019
National Level Workshop on Industrial Automation Using PLC and SCADA	EEE	14/02/2019
Two Day National Seminar on Energy Storage Conversion Technologies at SSN College of Engineering, Chennai	EEE	15/11/2019
Two Day Training Program on "Workshop on Simulation of Power Converters using MATLAB/SIMULINK" at SSN College of Engineering, Chennai	EEE	01/03/2019
Workshop on "Power Converters and Power Quality" in association with PELSMadras Chapter	EEE	29/08/2019
Gate Pulse Generation for Power Electronic Converters	EEE	03/10/2018
Entrepreneurship Awareness Camp	SSN Innovation Centre	11/02/2019
Simulation of Power	EEE	01/03/2019

Converters using MATLAB/SIMULINK		
One Day National level workshop titled "Electromagnetic design and analysis of electrical machines".	EEE	03/08/2018
Using Prose Lessons to Develop Skills, Elements and Critical Thinking	English	06/03/2019
IBM Expert Sessions on Predictive Analytics Artificial Intelligence	SACE	20/04/2019
SSN Analytica	SACE	01/12/2018
SSN Analytica	SACE	11/05/2019
DST, TNSCST, TIFAC Sponsored Hands on Training Programme on IPR related Issues for PICs and IPCUs Official	CREST	23/04/2018
Past Present and Future Challenges faced by Exhaust After Treatment systems for Diesel and Gasoline Engines	Mechanical Engineering	05/07/2018
Electrical discharge machining	Mechanical Engineering	16/02/2019
Fabrication of Polymer Matrix Composites	Mechanical Engineering	22/02/2019
Design and Fabrication of DIY GoKart	Mechanical Engineering	21/02/2019
MATLAB Programming	Mechanical Engineering	27/02/2019
IEEEXtreme: 12.0	Information Technology	20/10/2018
Hack Tackle 1.0	Information Technology	31/01/2019
Role of Trust in Internet of Things	Information Technology	12/07/2018
Career Guidance Entrepreneurship Cell	Information Technology	24/07/2018
Privacy and Security in Online Social Networks (OSN)	Information Technology	25/07/2018
Oracle Database Insights	Information Technology	20/02/2019
CyberPhysical Systems and IoT: The Road to Industry 4.0.	Information Technology	21/02/2019
Three day workshop on conventional machine learning to deep learningfor speech, image and text processing	ECE	16/08/2018

Two day workshop on Simulation Tools	ECE	25/09/2018
Two day seminar on Exciting Applications of Electromagnetics	ECE	27/09/2018
Three day workshop on Smart Materials Sensors and Energy Devices	ECE	16/12/2018
Two day workshop on COMPREHENSIVE HANDS ON TRAINING IN MEMS DESIGN TOOLS	ECE	04/12/2018
Six day FDP on Antenna Design and Measurement Techniques	ECE	10/12/2018
Two day National workshop on "IoT Analytics for VANET applications"	ECE	11/04/2019
Workshop on "Seismic Risk Assessment and Retrofitting"	Civil Engineering	27/09/2018
Guest lecture on "Civil Engineer and The Industry"	Civil Engineering	06/08/2018
Seminar on "Subsurface Engineering - Problems and Solutions"	Civil Engineering	07/02/2019
Guest lecture on "Practical Design of Steel Structures"	Civil Engineering	13/02/2019
Two days Training programme on Medical Electronics and Telemedicine	Biomedical Engineering and NITTR	09/07/2018
INSPIRE Internship science camp	Biomedical Engineering and Department of Physics	31/07/2018
one day seminar on Medical Textiles for Healthcare	Biomedical Engineering	31/08/2018
One day workshop on "Immuno electrophoresis and Histopathology"	Biomedical Engineering	12/09/2018
Two day workshop on Deep Learning'	Biomedical Engineering	18/09/2018
Two Day National Seminar On Computational Biomedical Engineering	Biomedical Engineering and Mathematics	26/09/2018
Two day National level workshop on the topic Brain Wave Robotics	Biomedical Engineering and TECHNEX 19	14/02/2019

#### 3.2.2 – Awards for Innovation won by Institution/Teachers/Research scholars/Students during the year

Title of the innovation	Name of Awardee	Awarding Agency	Date of award	Category
No Data Entered/Not Applicable !!!				
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#### 3.2.3 - No. of Incubation centre created, start-ups incubated on campus during the year

Incubation Center	Name	Sponsered By	Name of the Start-up	Nature of Start- up	Date of Commencement
1	SSN Incubation Centre	Ministry of Micro, Small Medium Enterprises (MSME)	TechEEE1	Health care supported by AICTE (SIH 2018)	31/05/2019
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#### 3.3 - Research Publications and Awards

3.3.1 - Incentive to the teachers who receive recognition/awards

State	National	International
0	0	6

#### 3.3.2 - Ph. Ds awarded during the year (applicable for PG College, Research Center)

Name of the Department	Number of PhD's Awarded
Biomedical Engineering	2
Electronics and Communication Engineering	10
Mechanical Engineering	5
CSE	2
Information Technology	7
Chemical Engineering	3
Electrical and Electronics Engineering	6
SSN Research Centre	3

#### 3.3.3 - Research Publications in the Journals notified on UGC website during the year

Туре	Department	Number of Publication	Average Impact Factor (if any)	
No Data Entered/Not Applicable !!!				
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3.3.4 – Books and Chapters in edited Volumes / Books published, and papers in National/International Conference Proceedings per Teacher during the year

Department	Number of Publication
No Data Entered/N	ot Applicable !!!
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# 3.3.5 – Bibliometrics of the publications during the last Academic year based on average citation index in Scopus/Web of Science or PubMed/Indian Citation Index

Title of the	Name of	Title of journal	Year of	Citation Index	Institutional	Number of
Paper	Author		publication		affiliation as	citations

# Mo Data Entered/Not Applicable !!!

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3.3.6 - h-Index of the Institutional Publications during the year. (based on Scopus/ Web of science)

	Title of the Paper	Name of Author	Title of journal	Year of publication	h-index	Number of citations excluding self citation	Institutional affiliation as mentioned in the publication
ĺ			No Data Ente	ered/Not App	licable !!!		
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3.3.7 - Faculty participation in Seminars/Conferences and Symposia during the year :

Number of Faculty	International	National	State	Local
Attended/Semina rs/Workshops	28	89	10	33
Presented papers	149	52	36	0
Resource persons	26	57	60	62

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#### 3.4 - Extension Activities

3.4.1 – Number of extension and outreach programmes conducted in collaboration with industry, community and Non- Government Organisations through NSS/NCC/Red cross/Youth Red Cross (YRC) etc., during the year

Title of the activities	Organising unit/agency/ collaborating agency	Number of teachers participated in such activities	Number of students participated in such activities	
Volunteer support for 2019 Election	Tamilnadu Police	2	100	
Summit class Teaching	Ullas Trust	4	40	
Wall painting	Environmentalist Foundation of India NGO	1	40	
Library Maintenance work	Roja Muthaiah Research Library	2	25	
Foldscope tool workshop	DBT, Govt of India	1	500	
Village clean up - Swachh Bharat summer internship	Govt.of India	1	40	
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3.4.2 – Awards and recognition received for extension activities from Government and other recognized bodies during the year

Name of the activity	Award/Recognition	Awarding Bodies	Number of students Benefited
National	Best NSS Volunteer	Anna University	1

Integration Camp	award			
IEEE Madras Section ( Student Branch)	Outstanding SB Counselor award 2018	IEEE Madras Section	1	
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3.4.3 – Students participating in extension activities with Government Organisations, Non-Government Organisations and programmes such as Swachh Bharat, Aids Awareness, Gender Issue, etc. during the year

Organising unit/Agen cy/collaborating agency	Name of the activity	Number of teachers participated in such activites	Number of students participated in such activites
College NSS Unit	Sawchh Bharat Summer Internship	1	40
Environmentalis t Foundation of India NGO	Lake clean up	1	50
Environmentalis t Foundation of India NGO	Coastal Clean up	1	40
	cy/collaborating agency  College NSS Unit  Environmentalis t Foundation of India NGO  Environmentalis t Foundation of	cy/collaborating agency  College NSS Unit Summer Internship  Environmentalis t Foundation of India NGO  Environmentalis t Foundation of up	cy/collaborating agency participated in such activites  College NSS Sawchh Bharat Summer Internship  Environmentalis Lake clean up 1  t Foundation of India NGO  Environmentalis Coastal Clean the foundation of t

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#### 3.5 - Collaborations

3.5.1 - Number of Collaborative activities for research, faculty exchange, student exchange during the year

Nature of activity Participant		Source of financial support	Duration	
No Data Entered/Not Applicable !!!				
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3.5.2 – Linkages with institutions/industries for internship, on-the- job training, project work, sharing of research facilities etc. during the year

Title of the linkage	Name of the partnering institution/ industry /research lab with contact details	Duration From	Duration To	Participant	
No Data Entered/Not Applicable !!!					
	linkage	linkage partnering institution/ industry /research lab with contact details  No Data Entered/No	linkage partnering institution/ industry /research lab with contact details	linkage partnering institution/ industry /research lab with contact details  No Data Entered/Not Applicable !!!	

3.5.3 – MoUs signed with institutions of national, international importance, other universities, industries, corporate houses etc. during the year

Organisation	Date of MoU signed	Purpose/Activities	Number of students/teachers participated under MoUs	
No Data Entered/Not Applicable !!!				
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#### CRITERION IV – INFRASTRUCTURE AND LEARNING RESOURCES

#### 4.1 - Physical Facilities

4.1.1 - Budget allocation, excluding salary for infrastructure augmentation during the year

Budget allocated for infrastructure augmentation	Budget utilized for infrastructure development
3119	2907

#### 4.1.2 - Details of augmentation in infrastructure facilities during the year

Facilities	Existing or Newly Added
Campus Area	Existing
Class rooms	Existing
Laboratories	Existing
Seminar Halls	Existing
Classrooms with LCD facilities	Existing
Seminar halls with ICT facilities	Existing
Number of important equipments purchased (Greater than 1-0 lakh) during the current year	Newly Added
Value of the equipment purchased during the year (rs. in lakhs)	Newly Added
Classrooms with Wi-Fi OR LAN	Existing

#### 4.2 – Library as a Learning Resource

4.2.1 – Library is automated {Integrated Library Management System (ILMS)}

Name of the ILMS software	Nature of automation (fully or patially)	Version	Year of automation
кона	Fully	19.05.00.000	2000

#### 4.2.2 - Library Services

Library Service Type	Existing	Newly Added	Total		
No Data Entered/Not Applicable !!!					
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4.2.3 – E-content developed by teachers such as: e-PG- Pathshala, CEC (under e-PG- Pathshala CEC (Under Graduate) SWAYAM other MOOCs platform NPTEL/NMEICT/any other Government initiatives & institutional (Learning Management System (LMS) etc

Name of the Teacher Name of the Module		Platformon which module is developed	Date of launching e- content			
No Data Entered/Not Applicable !!!						
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#### 4.3 - IT Infrastructure

#### 4.3.1 – Technology Upgradation (overall)

Туре	Total Co mputers	Computer Lab	Internet	Browsing centers	Computer Centers	Office	Departme nts	Available Bandwidt h (MGBPS)	Others
Existin g	1823	54	0	1	1	56	13	310	0
Added	110	2	0	0	0	0	0	310	0

Total	1933	56	0	1	1	56	13	620	0	bracket
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4.3.2 - Bandwidth available of internet connection in the Institution (Leased line)

620 MBPS/ GBPS

4.3.3 - Facility for e-content

Name of the e-content development facility	Provide the link of the videos and media centre and recording facility	
LMS	https://lms.ssn.edu.in	

#### 4.4 - Maintenance of Campus Infrastructure

4.4.1 – Expenditure incurred on maintenance of physical facilities and academic support facilities, excluding salary component, during the year

Assigned Budget on academic facilities	Expenditure incurred on maintenance of academic facilities	Assigned budget on physical facilities	Expenditure incurredon maintenance of physical facilites
56	54	1277	1174

4.4.2 – Procedures and policies for maintaining and utilizing physical, academic and support facilities - laboratory, library, sports complex, computers, classrooms etc. (maximum 500 words) (information to be available in institutional Website, provide link)

Academic Blocks: The available built up area of Educational buildings is 65,579 Sq. m. Separate blocks for Workshop, Central Library, Computer Centre, Administration, Science and Humanities are available. SSN Research centre is housed in EEE block. Common Facilities: Common Facilities like Electrical substation, Recreation Centre, Auditorium (1000 seater capacity), Auditorium (300 seater capacity), Canteen, Seminar Hall (120 seater capacity), Guest House, OHTUG sump, Driver shed, Stores cum toilet in playground constitute nearly 9353 Sq.m. of built up area. The entire campus is WiFi enabled. A clinic with full time Doctor and a nurse is available. A van is kept ready throughout the day for emergency hospital visit. Banking facility with an ATM centre, Modern Laundry, Stationery store and photo copying centre are available within the Campus. We have about 6 km length of metal road connecting all blocks with 8 km length of storm water drain to avoid water stagnation. Parking facility for 150 cars and 50 buses are provided. Library: The library is fully airconditioned. Entire Library process is computerized. KOHA Library software is used for issue, return. RFID and Biometric system are used in circulation section. Book search, renewal and reservation are available through Intranet. Sports: The college encourages sports activities and gives importance to pursue excellence in sports. The college has all necessary infrastructure for growing talents and developing sports personalities. The sports infrastructure comprises facilities for indoor and outdoor games. There are well groomed outdoor play fields for Cricket (Turf wicket with grass out field), Football, Tennis (Synthetic courts), Basketball, Volleyball, Athletics etc. We have an International standard indoor stadium for Basketball, Badminton (Hova Court), Table tennis Squash racket, and Air conditioned gym for boys and girls. Department: Mechanical Engineering department is endowed with good infrastructural facilities. It has adequate number of class rooms, faculty rooms, office rooms, seminar halls, libraries, and reading room facilities, state of art laboratories with sophisticated equipments. Computers are the main tool used to present multimedia items such as power point presentations (PPTs), video, animation and sound. In the classroom, computers have made a huge impact on the way teachers provide information to their students. Using computers, teachers have evolved their teaching methods? Instead of lecturing and writing notes on the blackboard, teachers can now show their students visual and audio material to enhance the learning process. These methods are much more effective

for students who observe information visually. We are using Elearning facility in our intranet to enable the course contents available to the students. The required softwares are installed in the classroom laptops to provide the hands on demonstration to the students in the theory class itself.

http://www.ssn.edu.in

#### **CRITERION V – STUDENT SUPPORT AND PROGRESSION**

#### 5.1 – Student Support

5.1.1 - Scholarships and Financial Support

	Name/Title of the scheme	Number of students	Amount in Rupees		
Financial Support from institution	Merit Scholarship, Rural Scholarship, Vidya Gyan Scholarship, Alumni Scholarship, AICTE Fee Waiver, Vamasundari Scholarship	551	18192156		
Financial Support from Other Sources					
a) National	SC, Merit Minorities Scholarship, SPDC (For NRIs), Single Girl Child Govt. of India, Railways. Physically Handicapped, BC/MBC Scholarship	382	13490129		
b)International	Nil	0	0		
	No file	uploaded.			

5.1.2 – Number of capability enhancement and development schemes such as Soft skill development, Remedial coaching, Language lab, Bridge courses, Yoga, Meditation, Personal Counselling and Mentoring etc.,

Name of the capability Date of implementation enhancement scheme		Number of students enrolled	Agencies involved			
No Data Entered/Not Applicable !!!						
<u>View File</u>						

5.1.3 – Students benefited by guidance for competitive examinations and career counselling offered by the institution during the year

Year	Name of the scheme	Number of benefited students for competitive examination	Number of benefited students by career counseling activities	Number of students who have passedin the comp. exam	Number of studentsp placed		
No Data Entered/Not Applicable !!!							
<u>View File</u>							

5.1.4 – Institutional mechanism for transparency, timely redressal of student grievances, Prevention of sexual harassment and ragging cases during the year

Total grievances received	Number of grievances redressed	Avg. number of days for grievance redressal
0	0	0

#### 5.2 - Student Progression

5.2.1 – Details of campus placement during the year

On campus			Off campus			
Nameof organizations visited	Number of students participated	Number of stduents placed	Nameof organizations visited	Number of students participated	Number of stduents placed	
	No Data Entered/Not Applicable !!!					
	<u>View File</u>					

5.2.2 - Student progression to higher education in percentage during the year

	Year	Number of students enrolling into higher education	Programme graduated from	Depratment graduated from	Name of institution joined	Name of programme admitted to
No Data Entered/Not Applicable !!!						
	<u>View File</u>					

5.2.3 – Students qualifying in state/ national/ international level examinations during the year (eg:NET/SET/SLET/GATE/GMAT/CAT/GRE/TOFEL/Civil Services/State Government Services)

Items	Number of students selected/ qualifying	
No Data Entered/Not Applicable !!!		
<u>View File</u>		

5.2.4 - Sports and cultural activities / competitions organised at the institution level during the year

Activity	Level	Number of Participants
English Theatre	National	200
SSN MUN	National	325
Tamil Club/ Saaral	College	150
Instincts 19	National	1800
Third Cancer Institute therapy session(music)	State	18
Various clubs of SSN	College	500
SSN CUP	State Level Inter Engineering College Volleyball Tournament	260
SSN TROPHY	National Level Inter Collegiate Tournament	1450
SSN OPEN	National Level Tennis Tournament	180
SSN CHAMPIONSHIP	State Level Inter Engineering College Football Tournament	310
Anna University Tournaments	Zone and Inter zone tournaments	480

#### 5.3 - Student Participation and Activities

5.3.1 – Number of awards/medals for outstanding performance in sports/cultural activities at national/international level (award for a team event should be counted as one)

Year	Name of the award/medal	National/ Internaional	Number of awards for Sports	Number of awards for Cultural	Student ID number	Name of the student
No Data Entered/Not Applicable !!!						
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5.3.2 – Activity of Student Council & representation of students on academic & administrative bodies/committees of the institution (maximum 500 words)

At the department level, every class has a class committee which consists of the students and faculty members. The Head of the department appoints a chairman for the committee who conducts periodic meetings and reports to the HoD. Class committee sets the rules and the regulations for the class behavior. It serves as the voice of the students in front of faculty and has a say in academic matters such as conduct of tests and so on. The class committee meets twice a semester. Every department has its own association of students whose office bearers are chosen by the faculty incharge in consultation with the Head of the Department. The students can apply for the various posts and suitable people are selected who run the affairs of the association, in particular the conduct of the annual technical event INVENTE. These associations are as follows: Association of Electrical and Electronics Engineers (AEEE) Association of Electronics and Communication Engineers (AECE) Association of Computer Engineers (ACE) Association of Information Technologists (AIT) Association of Chemical Engineers (ACE) Association of Biomedical Engineers (ABE) Association of Mechanical Engineers (AME) Association of civil Engineers (ACECIVIL) The institution does not have a student council but there are societies / clubs, the heads of which are part of the council which oversee all the cultural activities at SSN. Similarly, the heads of the technical clubs are responsible for all technical activities at SSN. These associations / societies provide avenues for the development of technical skills, updating knowledge, personality development and service to the society. These are as follows: Student Chapters of Association of Computing Machinery (ACM), Indian Society for Technical Education (ISTE), Computer Society of India (CSI) IETE Student Forum Entrepreneurship Development Cell (EDC) National Service Scheme (NSS) Youth Red Cross (YRC) Tamil Mandram English Literary Club (ELC) Fine Arts Club Music Club Dance Club Drama Club Photography Club Management Association Rotaract Students' Chapter Electrical Research Fraternity (ERF) The officebearers of these associations / societies are appointed by the respective faculty incharges in consultation with the administrative heads, which is the HoD in the case of cocurricular activities or a faculty member appointed by the Principal in the case of extracurricular activities. The office bearers of these associations / societies meet regularly for smooth conduct of various events under their auspices and submit an annual report. Every year, a selection of the students is made from these associations / societies, who are appointed on various committees to conduct the annual cultural event, INSTINCT.

#### 5.4 – Alumni Engagement

5.4.1 - Whether the institution has registered Alumni Association?

Yes

SSN Alumni Association Government Registered Body under societies Act 133/2018. Facilitates tapping the expertise and assistance of the network of SSN

graduates. Currently the association has 3 chapters in Chennai, Bengaluru and US. It has core committees and faculty coordinators for each department

5.4.2 - No. of enrolled Alumni:

15565

5.4.3 – Alumni contribution during the year (in Rupees) :

1625000

#### 5.4.4 - Meetings/activities organized by Alumni Association :

Annual General Body Meeting of SSN Alumni Association held on 22nd June,
 2019 2. Annual Alumni Meet January 5, 2019 3. Alumni meet held at Bay Area, USA on 10th June, 2018 4. Alumni meet held at New York, USA on 23rd June, 2018 5.
 SSN Alumni Association US Chapter has organized an Alumni meet at Bay Area on 2nd September 2018 6. Career development workshop and mock interview for final year Engg students on 4th Aug, 2018 7. Alumni in Campus Placements

#### CRITERION VI – GOVERNANCE, LEADERSHIP AND MANAGEMENT

#### 6.1 – Institutional Vision and Leadership

6.1.1 – Mention two practices of decentralization and participative management during the last year (maximum 500 words)

The two most important instances of decentralisation and participative management during the last year would be the preparation of the budget and the allot of internal funding projects for faculty and students All Heads of Departments, Function Heads, heads of research groups consult with their members and provide inputs to the overall department, function and ultimately to the institution budget. The selection of projects of internal funding follows a similar approach with faculty guides as the first level of judges and mentors, followed by heads of departments, dean research and finally an external committee.

6.1.2 – Does the institution have a Management Information System (MIS)?

Yes

#### 6.2 - Strategy Development and Deployment

6.2.1 – Quality improvement strategies adopted by the institution for each of the following (with in 100 words each):

Strategy Type	Details
Curriculum Development	The curricular gap is identified based on the feedback from students, faculty, alumni industry bodies etc. Gaps are discussed and suggestions sought from academic and industrial experts on the governing body. The Boards of Studies of the individual departments go through the gaps and suggestions and suggest suitable modification in the curriculum. Acadmeic Council and Board of Governing Body then ratify the changes.
Teaching and Learning	Tutorial classes are conducted The econtent for each course is prepared and uploaded in LMS.
Examination and Evaluation	An Exam Cell has been specifically constituted which follows the

	guidelines as mentioned in the Regulations. The cell headed by a controller coordinates with all the department for conduct of examination, evaluation and audits.
Research and Development	A Research Advisory Council (RAC) comprising of eminent researchers from India and abroad meet every six months to set the vision and oversee the research activities. Based on the suggestion of RAC, management is sanctioning fund for carryingout student research projects. This scheme is popularly known as 'Stimulus for Technological Innovation and Research among Students' (STIRS). Incentive schemes are in place to promote research publications of the faculy and the students Special incentive scheme is in place for faculty members having external funded projects.
Library, ICT and Physical Infrastructure / Instrumentation	Well established intranet and LMS are in place Well established Librabry with ample amount of books and journals International level cricket ground, Football field, squash arena, air conditioned Gym are established in the campus.
Human Resource Management	The Human Resource Manager oversees the recruitment, appraisal and welfare activities under the supervision of the management
Industry Interaction / Collaboration	Over 100 MoUs have been signed till date with various universities, institutions and organisations
Admission of Students	Anna university single window system and Management seats. For Management seats the admission is based purely on merit and criteria of admission is marks in Physics, Chemistry and Maths in class 12

6.2.2 – Implementation of e-governance in areas of operations:

E-governace area	Details
No Data Entered/N	ot Applicable !!!

## 6.3 - Faculty Empowerment Strategies

6.3.1 – Teachers provided with financial support to attend conferences / workshops and towards membership fee of professional bodies during the year

	Year	Name of Teacher	Name of conference/ workshop attended for which financial support provided	Name of the professional body for which membership fee is provided	Amount of support		
ì	No Data Entered/Not Applicable !!!						

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6.3.2 – Number of professional development / administrative training programmes organized by the College for teaching and non teaching staff during the year

Year	Title of the professional development programme organised for teaching staff	Title of the administrative training programme organised for non-teaching staff	From date	To Date	Number of participants (Teaching staff)	Number of participants (non-teaching staff)
No Data Entered/Not Applicable !!!						
<u>View File</u>						

6.3.3 – No. of teachers attending professional development programmes, viz., Orientation Programme, Refresher Course, Short Term Course, Faculty Development Programmes during the year

Title of the professional development programme	Number of teachers who attended	From Date	To date	Duration	
No Data Entered/Not Applicable !!!					
<u>View File</u>					

6.3.4 - Faculty and Staff recruitment (no. for permanent recruitment):

Teac	hing	Non-teaching		
Permanent	Full Time	Permanent	Full Time	
1	1	3	3	

#### 6.3.5 - Welfare schemes for

Nonale Gallette In							
Teaching	Non-teaching	Students					
• Housing loan reimbursement policy • Communication policy for reimbursement of telephone bills • Reimbursement of conveyance charges domestic, local and overseas • Vehicle allowance • Faculty performance incentive plan • Leave benefits: casual leave, vacation leave, Earn leave and maternity leave • Fee concession for wards of faculty • Health benefits - Medical insurance domiciliary expense reimbursement , hospitalization reimbursement • Group personal accident insurance • Employers	• Leave benefits: casual leave, Earn leave and maternity leave • Fee concession for wards of non teaching staff • Ex gratia • Performance bonus • Interest on subsidy on car loans • Breakfast subsidy • Health benefits - Medical insurance domiciliary expense reimbursement , hospitalization reimbursement • Group personal accident insurance • Employers contribution to PF • Gratuity • Gifts on special occasions (Wedding, Newborn , Deepawali)	• Group personal accident insurance • Subsidized lunch • Scholarship schemes (Merit cum means, Alumni, Merit, Sports, Walk in walk out, Vidhyagyan , Music ) • Group Insurance • Laptop policy					

contribution to PF •
Gratuity • Gifts on
special occasions (
 Wedding, Newborn ,
Deepawali) • Sponsorship
 for Ph.D • Skill
 allowance for Ph.D

#### 6.4 - Financial Management and Resource Mobilization

6.4.1 - Institution conducts internal and external financial audits regularly (with in 100 words each)

BSR Associates are statutory auditors of SSN Trust, who perform statutory audit and file Tax Returns for SSN Trust on yearly basis. In addition, SSN Trust is thoroughly reviewed by inhouse internal audit department headed by professionally qualified CA with more than 25 years of industry experience, which perform indepth internal audit across all departments at regular intervals. The report is submitted to audit committee, constituted of CFO, Trustees and Independent member, who has rich audit experience of around 40 Years

6.4.2 – Funds / Grants received from management, non-government bodies, individuals, philanthropies during the year(not covered in Criterion III)

Name of the non government funding agencies /individuals	Funds/ Grnats received in Rs.	Purpose		
Foundation For CSR @ REDINGTON Alumni Students	3200000	Funding the education of Rural students		
No file uploaded.				

#### 6.4.3 - Total corpus fund generated

3200000

#### 6.5 – Internal Quality Assurance System

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

Audit Type	External		Internal		
	Yes/No	Agency	Yes/No	Authority	
Academic	Yes	Fculty members from Reputed institutions TUV Rheinland, India Pvt Ltd. Chennai	Yes	SSN Senior Faculty Members	
Administrative	Yes	TUV Rheinland, India Pvt Ltd. Chennai	No		

#### 6.5.2 – Activities and support from the Parent – Teacher Association (at least three)

Parents of the students who failed in more than two subjects in continuous assessment tests and less than 75 attendance are called for meeting with teachers who handle subjects. Report on this parentteacher meeting is recorded and maintained in the class incharge file.

#### 6.5.3 – Development programmes for support staff (at least three)

1. Brainwave Robotics by Innovians Technologies on 14.02.2019 to 15.02.2019 2. NI Academic Research Day on 04.12.2018 3. Keysight IoT seminar on 25.07.2018

#### 6.5.4 – Post Accreditation initiative(s) (mention at least three)

Program Assessment Committee (PAC) formed for UG and PG ensures the quality of lesson plan, course assessment tools and question papers Domain expert group formed within the department To develop documentation software tool for the department/college to reduce paper consumption To improve the coding skills of students by organizing competitions through coding club To submit at least one student level proposal for internal funding involving other departments.

#### 6.5.5 – Internal Quality Assurance System Details

a) Submission of Data for AISHE portal	Yes
b)Participation in NIRF	Yes
c)ISO certification	Yes
d)NBA or any other quality audit	Yes

#### 6.5.6 - Number of Quality Initiatives undertaken during the year

Year Name of quality initiative by IQAC Date of conducting IQAC Duration From Duration To Participants								
No Data Entered/Not Applicable !!!								
<u>View File</u>								

#### **CRITERION VII - INSTITUTIONAL VALUES AND BEST PRACTICES**

#### 7.1 - Institutional Values and Social Responsibilities

7.1.1 – Gender Equity (Number of gender equity promotion programmes organized by the institution during the year)

Title of the programme	Period from	Number of Participants				
Female Male						
No Data Entered/Not Applicable !!!						

7.1.2 - Environmental Consciousness and Sustainability/Alternate Energy initiatives such as:

Percentage of power requirement of the University met by the renewable energy sources

10.5 kW capacity solar power energy system and 63 nos. of 500 LPD solar water heaters are installed at hostels. SSN has adopted a policy to use LED lamps for outdoor light systems.

#### 7.1.3 - Differently abled (Divyangjan) friendliness

Item facilities	Yes/No	Number of beneficiaries
Physical facilities	Yes	3
Provision for lift	Yes	3
Ramp/Rails	Yes	3
Rest Rooms	Yes	1

#### 7.1.4 - Inclusion and Situatedness

locational engage with advantages and and disadva contribute to ntages local
--

		community					
2018	4	3	03/09/201 8	10	Volunteer support for 2019 Election, Summit class Teaching, Wall painting, Library M aintenanc e work	support for 2019 Election, Summit class Teaching, Wall painting, Library M	205
2019	4	4	09/03/201	12	Foldscope tool workshop Swachh Bharat	Lake clean up Coastal Clean up	670

#### 7.1.5 - Human Values and Professional Ethics Code of conduct (handbooks) for various stakeholders

Title	Date of publication	Follow up(max 100 words)	
Student's code of conduct	03/08/2018	Every year issued to the students	

#### 7.1.6 – Activities conducted for promotion of universal Values and Ethics

Activity	Duration From	Duration To	Number of participants
Model United Nations (MUN) It promotes world peace, security threats faced by country, Economic reform and policies, Human rights, world politics through discussion panels.	14/09/2018	16/09/2018	250
SYCON SSN Youth Conference	21/03/2019	21/03/2019	10

#### 7.1.7 - Initiatives taken by the institution to make the campus eco-friendly (at least five)

1.Tobacco free campus 2. Plastic free campus 3. Organic farm started by YRC 4. Growing tree across the campus 5. Solar powered geysers at campus hostels 6. Solar powered charging points 7. Bicycles to commute within the campus 8. Recycling of waste water and irrigation of plants in campus

#### 7.2 - Best Practices

#### 7.2.1 – Describe at least two institutional best practices

• Outcome Based Education (OBE) and Rigorous learnercentric teaching helped in improving the evaluation of teaching learning process. • Usage of LMS for content delivery • Consistent mentoring of the students (One hour allotted per week) • Preparing mentoring report every month • Tracking slow learners and involving in parents' meetings • Research funds to faculty and students as seed money for selected Projects • Incentives for research achievements in Journal

publications, Patents and funded projects • SSN Scholarship worth about Rs.1.9 crore to students disbursed in 201819.

Upload details of two best practices successfully implemented by the institution as per NAAC format in your institution website, provide the link

http://www.ssn.edu.in/

#### 7.3 - Institutional Distinctiveness

- 7.3.1 Provide the details of the performance of the institution in one area distinctive to its vision, priority and thrust in not more than 500 words
  - Active research practices leading to o increased publications in Journals o sponsored projects Innovation centre and SSN BEST Centre that facilitate faculty / students / alumni to transform their innovative ideas into products.
    - Improved Industry Interaction resulting in o internships for students o consultancy projects for faculty members Research ambience World class Infrastructure for sports

#### Provide the weblink of the institution

http://www.ssn.edu.in/

#### 8. Future Plans of Actions for Next Academic Year

1. In line with IQAC, it is proposed to have a department level Quality Assurance Cell (DQAC). The objective of the DQAC will be to • Monitor "Continuous Improvement" • Develop a target for Quality Improvement of the dept. • Plan improvement activities and ensure implementation. • Track progress of all academic and Research activities of all the programs. • Contribute to identifying and spreading "Innovative Practices". The DQAC will work towards developing and sustaining systems that will ensure periodic collection of data for facilitating year end compilation for IQAC report. 2. Implementation of ERP software for Autonomous stream students 3. To submit compliance report to NBA to get reaccreditation for Chemical and Mechanical Engineering Department. 4. To apply for NBA accreditation for Civil Engineering Department. 5. To achieve total number of publications (N) not less than twice the number of faculty members (F). With at least, (1.25 F) publication in Web of Science. 6. To achieve the number of ongoing research projects (At any instant of time) not less than the one fourth of the number of faculty members holding Doctorate degree (D). i.e. number of ongoing research projects > 0.25 D. 7. To achieve more than 92 pass percentage in each subject and an overall pass percentage of above 85. 8. To achieve a class average mark of more than 67 or 6.7 Avg. GPA in each subject.