

### YEARLY STATUS REPORT - 2021-2022

Part A			
Data of the Institution			
1.Name of the Institution	SNS College of Engineering		
Name of the Head of the institution	Dr.S.Charles		
• Designation	Principal		
Does the institution function from its own campus?	Yes		
Phone No. of the Principal	7550316708		
Alternate phone No.	7339223443		
Mobile No. (Principal)	9443914199		
Registered e-mail ID (Principal)	principal@snsce.ac.in		
• Address	SNS Kalvi Nagar, Sathy Main Road (Opp. CRI Pumps), Kurumbapalayam (Po), S.S.Kulam (via), Coimbatore		
• City/Town	Coimbatore		
State/UT	Tamilnadu		
• Pin Code	641107		
2.Institutional status			
Autonomous Status (Provide the date of conferment of Autonomy)	07/08/2019		
Type of Institution	Co-education		
• Location	Rural		

• Financial Status			Self-f	inanc	eing			
Name of the IQAC Co-ordinator/Director			Dr. P.Gnanasundari					
• Phone No	).			755031	6708-	-121		
• Mobile N	o:			944340	7147			
• IQAC e-r	nail ID			iqac@snsce.ac.in				
3.Website addre (Previous Acade	,	the AC	QAR	https://snsce.ac.in/agar/				
4.Was the Acad that year?	emic Calendar p	repare	ed for	Yes				
• '	nether it is upload nal website Web		ne	https://snsce.ac.in/coe/				
5.Accreditation	Details							
Cycle	Grade	CGPA		Year of Accredita	ation	Validity fro	om	Validity to
Cycle 1	A	3	.01	201!	5	24/12/20	15	02/03/2020
Cycle 1	A	3.01		2020	)	03/03/20	20	31/12/2024
6.Date of Establishment of IQAC				15/01/2015				
7.Provide the list Institution/Department of UGC, etc.)?	-		•					
Institution/ Dep ment/Faculty/So ool			Funding	Agency		of Award Duration	A	mount
NIL	NIL	NI		IL.		Nil		NIL
8.Provide detail	s regarding the	compos	sition of tl	he IQAC:				
Upload the latest notification regarding the composition of the IQAC by the HEI		View File	<u>.</u>					
9.No. of IQAC r	neetings held du	ring th	ne year	4				

Were the minutes of IQAC meeting(s) and compliance to the decisions taken uploaded on the institutional website?	Yes
If No, please upload the minutes of the meeting(s) and Action Taken Report	No File Uploaded
10.Did IQAC receive funding from any funding agency to support its activities during the year?	No
If yes, mention the amount	

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

Enhancement in Teaching Learning process through LMS

Faculty members and students have been motivated to undergo Industrial Training in reputed industries of their core areas with the funding from the management.

Students are motivated to participate and explore their innovative ideas in various Hackathon and develop new products by providing fund from the management

Faculty members have been motivated and facilitated to attend faculty development training programs and workshops in NITs/IITS/IISC and other reputed institutions

## 12.Plan of action chalked out by IQAC at the beginning of the academic year towards quality enhancement and the outcome achieved by the end of the academic year:

Plan of Action	Achievements/Outcomes
Formulation of startup policies to promote a culture of entrepreneurship amongst students.	Significant increase in the number of registered Significant increase in the number of registered startups opened by students thereby boosting the job market. Total startup:17
The faculty members are motivated by the Research and Development Review Committee to publish their research finding in SCI journals and apply	In the current year, 76research papers are published by our faculty members in reputed international journals so far.

research funding in various agencies.	
Providing various Placement oriented training programs such as BEC, CODE IT, Several Programs were organized for students regarding placement 12/2/21, 10:05 AM https://assessmentonline.naac.gov.in/public/index.php/hei/generateAqar_HTML/MTUyNTE= https://assessmentonline.naac.gov.in/public/index.php/hei/generateAqar_HTML/MTUyNTE= 5/52 communication skill training, C programming ,Java and Python for the students	77 Programs were organized for students regarding placement Separate portal also available for students to practice the coding and VQAR in order to improve the placement
Conducting awareness programs and programs related to Entrepreneurship for the students	13 Programs were conducted for our students through ED cell ,IIC and IHUB
To develop products through students projects and to get patents through innovative products	16 activities have been carried out to develop the products
To Publish research papers in Scopus Indexed journals by UG and PG students	22 Scopus publications and 11 IEEE Conference publications have bee published through student projects
Conducting various Guest lectures and alumni interaction on current topic	96 Guest lectures and alumni interaction have arranged for their students.
Planned to conduct workshop to enhance the skills among the students in the Odd Saturdays Social Activities The following social activities will be carried out to give humanitarian Perspective and values of life to our college students and to give knowledge and technological exposure	Various clubs like NSS, NCC and Social Awareness camp have been conducted in and around Coimbatore

# 13. Was the AQAR placed before the statutory body?

• Name of the statutory body

Name of the statutory body	Date of meeting(s)
Governing Council	01/04/2023

## 14. Was the institutional data submitted to AISHE?

Yes

• Year

Year	Date of Submission
2022-23	23/02/2022

### 15. Multidisciplinary / interdisciplinary

The college adopts Multidisciplinary education which is a unique educational approach that allows the students to learn & explore distinct subjects or curriculum from various disciplines. For instance, a student of Mechanical Engineering can take a subject from Agriculture Engineering or Management Studies.

Multidisciplinary approach is a method of curriculum integration that highlights the diverse perspectives that different disciplines can bring to illustrate a theme, subject or issue. The college follows Design thinking based multidisciplinary curriculum, multiple disciplines are used to study the same topic.

As <u>National Education Policy 2020 (NEP 2020)</u> has also insisted to pay attention to it, we have been a pioneer in implementing multidisciplinary and interdisciplinary approaches.

Multidisciplinary / interdisciplinary approach in Curriculum

- Open Electives (Electives should be chosen across boundaries)
- Value added Courses can be undertaken from any discipline.
- Projects/Mini Projects can be interdisciplinary with students from different discipline of study.
- All Non Academic credits can be from Multiple disciplines
- Language Electives are also offered

Multidisciplinary / interdisciplinary approach in Other Activities

- Project presentation and competitions are interdisciplinary in nature
- Hackathon and Industrial Training are interdisciplinary
- Journal Publication, Conference Presentations, Patent publications are also interdisciplinary

#### 16.Academic bank of credits (ABC):

The college heads forward to implement the Academic Bank of Credit implemented Ministry of Education Government of India. Soon after getting the direction from the affiliating University it would be implemented. As the college is accredited by NAAC, UGC with A Grade (3.01 score), It can offer courses to student of other institutions to earn credits.

- 1. It aims to promote student centricity in higher education with learner-friendly approaches across the country and promote a more inter-disciplinary approach in higher education.
- 2. It will enable students to choose the best courses/combination of courses to suit their interest.
- 3. It will enable students to select the best departments or institutions or their combination to suit their interest
- 4. It will allow students to make specific modifications/specialisations to their degree programmes rather than undergoing the regularly prescribed degree/courses.
- 5. It enables multiple entry-multiple exit schemes for students to complete their degrees as per their time preferences.
- 6. It provides mobility across various disciplines like Degree, Diploma, PG Diploma, Certificate programmes.
- 7. It facilitates lifelong learning amongst students in full time and part-time modes.
- 8. It will maintain academic records and issue an official transcript. This transcript will be recognised by all the member-universities of ABC.
- 9. If students are working towards a qualification, they will have to accumulate sufficient credits to gain the total credit value of the qualification.

### 17.Skill development:

The College is keen to shape the young minds through development of Technical Skills and Life Skills focusing their professional development. To achieve this, the college has created a Centre for Skill and Career Development (SCD), which offers insightful Skills Development Programmes to groom students and make them corporate ready. The college achieves the enhancement of employability objectives by conducting intensive process oriented classroom training & by organizing Club of Excellence events related to both Soft and Hard Skills. These classes and events are managed by a well-groomed team from Academics. Students' get an opportunity to attend a wide range of interactive workshops, training sessions that help them to recognize, develop and articulate their employ-ability skills for their future success.

The College endeavours to develop and sharpen critical technical skills along with values and ethics to produce excellent human resource. They make sure that students are corporate ready by Inculcating in them not only with good academic grades but developing an all-rounder in life skills as well.

#### Skill Development Activities Practised

- Skill Dominating courses in the Curriculum: 40%
- Two tools on latest technologies in the curriculum
- Language skills -Extra classes and Language Electives
- Blended and hands on learning practices
- Mini Projects (3 Nos) and Project Phase I & II
- Experiential Learning- Internship, Industrial Training and Industry Projects
- Regular monthly activities for students to devlop their Quantitative ability, verbal and Aptitude Skills
- Encouragement to participate in technical contests and Hackathons
- Mandatory Online Courses
- Encouragement for Sports and Cultural activities
- Act on Dream Club for overall skill development

18.Appropriate integration of Indian Knowledge system (teaching in Indian Language, culture, using online course)

Cultural awareness and expression are among the major competencies considered important to develop in youth today. In order to provide them with a sense of identity, belonging, as well as an appreciation of other cultures and identities SNS College of Engineering has taken appropriate initiatives.

- A course on Essence of Indian Traditional Knowledge is introduced as a mandatory course for the students. It covers topics such as,
  - Indian Literature, Culture, Tradition, and Practices
  - Indian Religion, Philosophy, and Practices
  - Indian Knowledge System on Sciences & Trade
  - Indian Cultural Heritage & Arts
- Integrity and Unity among different culture is encouraged by celebrating various cultural events
- Traditional and Cultural Days are celebrated with real sense and spirit
- Technology in local languages is also promoted
- Faculty members have translated material of technical courses in to their Regional Language benefitting many.

#### 19. Focus on Outcome based education (OBE): Focus on Outcome based education (OBE):

The College adopts Outcome Based Education from 2018

OBE Process and Framework:

There are four levels of outcomes are considered in OBE Processes such as Course Outcomes (CO), Program Outcomes (PO), Program Specific Outcomes (PSO) and Program Educational Objectives (PEO).

OBE Assessment: OBE is driven by assessments that focus on well-defined learning outcomes and not by other factors such as what is taught, the duration taken by the students to achieve the outcomes or which path the students take to achieve their targets.

In SNS College of Engineering the PO's and CO's are disseminated to the students by the following methods:

- Syllabus with PO's and CO's are displayed on the college website.
- Curriculum and Syllabus book with POs, PEOs and COs are available in the library for reference.
- POs and PEOs are displayed at prominent places in the department including classrooms and laboratories.
- COs are included in delivery plan, lab manuals and course

- files for the respective courses.
- The guidelines for framing of COs using bloom's taxonomy are given to faculty members through IQAC meetings and through subsequent training to faculty members.
- The Program Outcomes (POs) and Program Specific Outcomes (PSOs) are developed from the Graduate Attributes prescribed by NBA-Washington Accord.
- Course Outcomes (COs) are defined for each course and they are mapped to POs and PSOs.

#### CO and PO Assessment

- The COs are assessed through a structured pattern at the end of the course through Direct and Indirect Assessment methods.
- The CO attainment is assessed directly through Internal Assessment Examination, Assignments, Lab records and Model examinations
- The CO attainment is also assessed indirectly with survey forms containing questions related to each course. The POs and PSOs are assessed indirectly through Exit survey forms where the final year students at the end of their graduation submit their feedback on curriculum. Also the Alumni survey forms are used to take the feedback from Alumni to assess the POs and PSOs. The Employer Survey forms are used to take the survey from the employer to measure the PO attainments.

#### **20.Distance education/online education:**

- 1. Outline the possibilities of offering vocational courses through ODL mode in the institution.
- 1. Describe about the development and use of technological tools for teaching learning activities. Provide the details about the institutional efforts towards the blended learning.

SNS College of Engineering is an Autonomous Institution, approved by AICTE and affiliated to Anna University. As per the guidelines of statutory bodies we can offer Vocational courses through ODL only after obtaining No Objection Certificate from them. As of now we are not offering any distance education programmes.

SNSCE uses a variety of Information Communication Technology (ICT)

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enabled tools to support effective pedagogy. All faculty members use ICT tools very effectively to enhance the teaching-learning process. All the Classrooms are equipped with LCD Projection Systems, computer and internet connectivity etc. These facilities enhance lecture delivery, effective communication and in-class assessments. In all departments, faculty rooms are equipped with desktop computers and all necessary resources such as Wi-Fi connectivity throughout the campus.

Well-equipped smart classroom and interactive boards help the faculty and students to present PPTs and Videos effectively. Laboratories, classrooms, Seminar halls, Conference Rooms, Auditoriums, and Hostels are enabled with Wi-Fi facility which gives space for students to learn from e-resources and update their skills. Automated Digital Library with personal computers and Online Public Access Catalogue system makes easy access for students and faculty members. Language laboratories with individual headsets and webcams help handle online classes and record quality audio and video to update as an e-learning resource in YouTube and social media. Study materials, assignments, activities, and assessments are shared through Google classrooms, Google forms, SNS Courseware-a dedicated portal for our students. The Institution has access to eresources namely IEEE explore, DELNET, e-ShodhSindhu, National Digital Library of India, NPTEL. In the new Design Thinking Based Curriculum framework blended learning is encouraged among students. Our students have enrolled inMassive Open Online Courses (MOOCs) provided by Coursera, edX, Udacity, Udemy, NPTEL, etc. The college also has E Content Development Facility which is used by our faculty members to create video lectures which is posted in YouTube for the benefit of students.

#### **Extended Profile**

#### 1.Programme

1.1

Number of programmes offered during the year:

File Description	Documents
Institutional Data in Prescribed Format	<u>View File</u>

#### 2.Student

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2.1

Total number of students during the year:

File Description	Documents
Institutional data in Prescribed format	<u>View File</u>

2.2

Number of outgoing / final year students during the year:

File Description	Documents
Institutional Data in Prescribed Format	<u>View File</u>

2.3

Number of students who appeared for the examinations conducted by the institution during the year:

File Description	Documents
Institutional Data in Prescribed Format	<u>View File</u>

#### 3.Academic

3.1

Number of courses in all programmes during the year:

File Description	Documents
Institutional Data in Prescribed Format	<u>View File</u>

3.2

Number of full-time teachers during the year:

Extended Profile		
1.Programme		
1.1	14	
Number of programmes offered during the year:		
File Description	Documents	
Institutional Data in Prescribed Format	<u>View File</u>	
2.Student		
2.1	1558	
Total number of students during the year:		
File Description	Documents	
Institutional data in Prescribed format	<u>View File</u>	
2.2	239	
Number of outgoing / final year students during t	he year:	
File Description	Documents	
Institutional Data in Prescribed Format	<u>View File</u>	
2.3	1558	
Number of students who appeared for the examinations conducted by the institution during the year:		
File Description	Documents	
Institutional Data in Prescribed Format	<u>View File</u>	
3.Academic		
3.1	498	
Number of courses in all programmes during the year:		
File Description	Documents	
Institutional Data in Prescribed Format	<u>View File</u>	

3.2	133
Number of full-time teachers during the year:	
File Description	Documents
Institutional Data in Prescribed Format	<u>View File</u>
3.3	133
Number of sanctioned posts for the year:	
4.Institution	
4.1	676
Number of seats earmarked for reserved categoric GOI/State Government during the year:	es as per
4.2	41
Total number of Classrooms and Seminar halls	
4.3	988
Total number of computers on campus for acader	mic purposes
4.4	361.4752
Total expenditure, excluding salary, during the yell Lakhs):	ear (INR in

### Part B

#### **CURRICULAR ASPECTS**

### 1.1 - Curriculum Design and Development

1.1.1 - Curricula developed and implemented have relevance to the local, national, regional and global developmental needs which are reflected in Programme Outcomes (POs), Programme Specific Outcomes (PSOs) and Course Outcomes (COs) of the various Programmes offered by the Institution.

The curriculum have been formulated in accordance with the guidelines of AICTE, affiliating university and in alignment with the vision and mission of the Institution. Considering the technology enabled development the graduate attributes and Program Educational Outcomes(PEOs) are designed, based on which Program Outcomes(POs) and Program Specific Outcomes(PSOs) are charted out.

The curriculum is developed in such a way that more emphasis is made on student centric learning. the objective is to create technical knowledge incorporated with science and technology enabled development among the students community. The design thinking curriculum is implemented with activity based learning, research and outreach activities which led the institutions to reach potential excellence. The curriculum covers multiple facets by promoting higher order thinking through analyzing, evaluating concepts, processes, procedures and principles in education. The course outcomes are designed in line with the revised Bloom's Taxonomy.

Structured committees at the department level (BOS) and at the institute level (Academic Council) with domain experts from reputed organizations/industry formulate the syllabi for all the disciplines'. Student feedback through course end survey is considered for the updations during the revisions to the curriculum. The institute autonomy provides Academic Flexibility to introduce new courses for overall development and up gradation to the current industry needs. The choice-based credit system adopted in the institute has given scope to the students to learn cross domain subjects/technologies and take up inter-disciplinary project work for the development of rounded personality.

File Description	Documents
Upload additional information, if any	<u>View File</u>
Link for additional information	https://snsce.ac.in/coe/

#### 1.1.2 - Number of Programmes where syllabus revision was carried out during the year

4

File Description	Documents
Minutes of relevant Academic Council/BOS meeting	<u>View File</u>
Details of syllabus revision during the year	<u>View File</u>
Any additional information	<u>View File</u>

### 1.1.3 - Number of courses focusing on employability/entrepreneurship/ skill development

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### offered by the Institution during the year

#### 235

File Description	Documents
Curriculum / Syllabus of such courses	<u>View File</u>
Minutes of the Boards of Studies/ Academic Council meetings with approval for these courses	<u>View File</u>
MoUs with relevant organizations for these courses, if any	<u>View File</u>
Any additional information	<u>View File</u>

### 1.2 - Academic Flexibility

### 1.2.1 - Number of new courses introduced across all programmes offered during the year

#### 238

File Description	Documents
Minutes of relevant Academic Council/BoS meetings	<u>View File</u>
Any additional information	<u>View File</u>
Institutional data in prescribed format (Data Template)	<u>View File</u>

## ${\bf 1.2.2 - Number\ of\ Programmes\ offered\ through\ Choice\ Based\ Credit\ System\ (CBCS)/Elective\ Course\ System}$

13

File Description	Documents
Minutes of relevant Academic Council/BoS meetings	<u>View File</u>
Any additional information	<u>View File</u>
List of Add on /Certificate programs (Data Template)	<u>View File</u>

### 1.3 - Curriculum Enrichment

1.3.1 - Institution integrates cross-cutting issues relevant to Professional Ethics, Gender, Human Values, Environment and Sustainability, and Human Values into the curriculum

Courses to address Environment and Sustainability

The curriculum includes various courses that address Environment, concern for environment, awareness on hazards for environment. For example, the courses Environmental Science, Environmental and social impact assessment, green building design, waste water treatment, Air pollution and control engineering, disaster management and green computing are included as electives to address Environment and Sustainability.

Courses to address Human Values and Professional Ethics

The curriculum includes various courses to address Professional Ethics and Human Values, which teaches social development to the course Indian Constitution, Professional Ethics in Engineering, human rights, global culture and global business ethics and law.

As a part of Social Responsibility Initiatives (SRI) our institution conducts various activities such as SANTA 365, Neighborhood School Program, Blood Donation Camp, Dental Camp, Anti -Drug Day, Swachh Bharat, Road Cleaning, Relief Camp, UBA, AIDS Rally, Health Check-Up, Eye Camp, Make A Wish, Performance Evaluation Test, Talent Hunt & Talent Competition for identifying and recognizing the young talents from all over Tamil Nadu. It is a promise that everyone should contribute for the society while working for the social, cultural and, ecological causes.

#### Gender Issues

The learning culture provides various opportunity for students to demonstrate professional behavior. The Women Empowerment Cell and the Anti-sexual harassment committee continuously offer various events like Seminar, panel discussions on gender sensitization. The impact of these programs is evident through the confidence portrayed by all students irrespective of their gender.

File Description	Documents
Upload the list and description of the courses which address issues related to Gender, Environment and Sustainability, Human Values and Professional Ethics in the curriculum	<u>View File</u>
Any additional information	<u>View File</u>

## 1.3.2 - Number of value-added courses for imparting transferable and life skills offered during the year

21

File Description	Documents
List of value-added courses	<u>View File</u>
Brochure or any other document relating to value-added courses	<u>View File</u>
Any additional information	<u>View File</u>

#### 1.3.3 - Number of students enrolled in the courses under 1.3.2 above

#### 1348

File Description	Documents
List of students enrolled	<u>View File</u>
Any additional information	<u>View File</u>

### 1.3.4 - Number of students undertaking field work/projects/ internships / student projects

859

File Description	Documents
List of programmes and number of students undertaking field projects / internships / student projects	<u>View File</u>
Any additional information	<u>View File</u>

### 1.4 - Feedback System

## 1.4.1 - Structured feedback and review of the A. All 4 of the above syllabus (semester-wise / year-wise) is

### obtained from 1) Students 2) Teachers 3) **Employers and 4) Alumni**

File Description	Documents
Provide the URL for stakeholders' feedback report	https://snsce.ac.in/agar 2021-22/
Upload the Action Taken Report of the feedback as recorded by the Governing Council / Syndicate / Board of Management	<u>View File</u>
Any additional information	<u>View File</u>

### 1.4.2 - The feedback system of the Institution A. Feedback collected, analysed comprises the following

and action taken made available on the website

File Description	Documents
Provide URL for stakeholders' feedback report	https://snsce.ac.in/agar 2021-22/
Any additional information	<u>View File</u>

#### TEACHING-LEARNING AND EVALUATION

#### 2.1 - Student Enrollment and Profile

#### 2.1.1 - Enrolment of Students

### 2.1.1.1 - Number of students admitted (year-wise) during the year

676

File Description	Documents
Any additional information	<u>View File</u>
Institutional data in prescribed format	<u>View File</u>

### 2.1.2 - Number of seats filled against reserved categories (SC, ST, OBC, Divyangjan, etc.) as per the reservation policy during the year (exclusive of supernumerary seats)

676

File Description	Documents
Any additional information	<u>View File</u>
Number of seats filled against seats reserved (Data Template)	<u>View File</u>

#### 2.2 - Catering to Student Diversity

2.2.1 - The institution assesses students' learning levels and organises special programmes for both slow and advanced learners.

The student's data base was analyzed based on the internal exam marks, submission of assignment, class room interaction, curricular and co-curricular activities. Based on the analysis, students are categorized like slow learners, medium learners and advanced learners.

Activities for Slow Learners

Course teachers incessantly take care and periodically monitor the performance of slow learners through the following activities

Remedial classes after college hours & Question bank for easy preparation

Learning from Peer Groups

Interaction with parents on the performance of their wards

Special attention on Mathematics courses & English for Tamil medium students

Effective mentorship to resolve the difficulties faced by the slow learners

Activities for Advanced Learners

Advanced Learners are provided with the flexibility of completing their Eighth semester courses in fast track mode, that enables them to undergo full time internship. Advanced learners are encouraged to develop, National Level technical contests such as Smart India Hackathon, Codevita/go-kart/e-kart. Technology Business Incubator (TBI) programs (FORGE), Entrepreneurship Activities.

Additionally, students are given professional trainings on latest

technologies, GATE, GRE, TOEFL and Foreign language (German, French, Japanese) to get certifications. The awards such as Best Outgoing student, outstanding student of the department and All Round Performer are awarded every year during the Annual day.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://snsce.ac.in/5pillars/

### 2.2.2 - Student - Teacher (full-time) ratio

Year	Number of Students	Number of Teachers
02/06/2021	1558	133

File Description	Documents
Upload any additional information	<u>View File</u>

#### 2.3 - Teaching- Learning Process

2.3.1 - Student-centric methods such as experiential learning, participative learning and problem-solving methodologies are used for enhancing learning experiences:

The Institution has adopted student centric pedagogies to enhance student engagement as a part of Experiential Learning,
Participative Learning and Problem Solving

Experiential Learning Experiential learning is an engaged learning process whereby students "Learn by Doing". Some of the experiential methods practiced in the institution are

Mini Project - Empathy study and effective application of theoretical concepts

Capstone Project-One projects during their last semester which helps to apply what they have learnt during their study of the program

Industrial Projects - Projects done for real industrial problems Simulation- Makes understanding more clear because of visualization

Industrial Visits - Gives a real world experience of workplace

Students' active participation in learning inside the campus is ensured with the support of various activities such as group discussion, brainstorming, role play, peer group learning and flipped classroom. Participation and showcasing the students' talent in top industrial contests such as Code Debugging, Hackathon, Ideathon, Go-Kart/E-Kart, CodeVita etc.

Problem Solving Methodologies

The students are made to observe, understand, analyze, interpret find solutions, and perform applications that lead to a holistic understanding of the concept. Some of the methods followed are,

Tutorials - Students work in groups/individual to solve problems with the help of a teacher

Case Studies - Analyzing a case enable the students to understand the nuances of the problem and apply their knowledge and skill to solve it. Group Assignments - Solving problem in groups by mutual sharing and collective wisdom.

File Description	Documents
Upload any additional information	<u>View File</u>
Link for additional Information	https://snsce.ac.in/studentslife/

## 2.3.2 - Teachers use ICT-enabled tools including online resources for effective teaching and learning

Information and Communication Technology (ICT) enabled classrooms in SNSCE are equipped with facilities like LCD projectors, Internet etc., to enable the students to visualize the concepts being taught. This enhance the learning experience of the students and understand the concepts better.

Students are also encouraged to take Assignments, Case studies and Seminars for inculcating critical thinking in the learning process. CLT (Center for Learning and Teaching) provides faculty with guidance and support to be effective as teachers and mentors and also creating an educational space that promotes excellence and innovation in teaching communities.

Student-centric learning activities such as puzzles solving, role play, analogy, project/ problem based learning, seminar on recent trends, quiz, online tests, brainstorming, tutorials, case study, group discussion and mind map techniques have been practiced for better understanding of the students. Student-centric learning facilities such as SNS courseware, NPTEL or Video based presentations, ICT enabled Class rooms, Online multiple choice questions, webinars and remote learning through online resources are created for student's access at any time

Students are encouraged to use ICT in all their presentation and they are encouraged to participate in inter-departmental and intercollegeate competitions in co-curricular activities.

File Description	Documents
Provide link for webpage describing ICT enabled tools including online resources for effective teaching and learning process	https://www.snscourseware.org/snscenew/
Upload any additional information	<u>View File</u>

#### 2.3.3 - Ratio of students to mentor for academic and other related issues

#### 2.3.3.1 - Number of mentors

#### 133

File Description	Documents
Upload year-wise number of students enrolled and full-time teachers on roll	<u>View File</u>
Circulars with regard to assigning mentors to mentees	<u>View File</u>

#### 2.3.4 - Preparation and adherence to Academic Calendar and Teaching Plans by the institution

Academic calender is prepared with the inputs received from all stake holders and also in line with the schedules announced by the affiliating University, College Handbook and Calendar is prepared and released at the beginning of every academic year and distributed to all stake holders. Every semester each department prepares their tentative plan of action such as lesson plan, content beyond syllabus, identifying and fixing experts for guest lectures on required topics, preparation of models, charts etc. and displays the same in the respective notice boards.

Academic calendar also paves way for the faculty members to undergo training programs, if required, for effective knowledge dissemination. For students they will be able to plan their Industrial visits during the academic year, internships and inplant training during vacation. With the tentative schedule of Internal Examinations, it is possible for them to prepare well ahead of the examinations.

File Description	Documents
Upload the Academic Calendar and Teaching Plans during the year	<u>View File</u>

#### 2.4 - Teacher Profile and Quality

#### 2.4.1 - Number of full-time teachers against sanctioned posts during the year

133

File Description	Documents
Year-wise full-time teachers and sanctioned posts for the year	<u>View File</u>
List of the faculty members authenticated by the Head of HEI	<u>View File</u>
Any additional information	<u>View File</u>

## 2.4.2 - Number of full-time teachers with PhD/ D.M. / M.Ch. / D.N.B Super-Specialty / DSc / DLitt during the year

20

File Description	Documents
List of number of full-time teachers with PhD./ D.M. / M.Ch. / D.N.B Super-Specialty / D.Sc. / D.Litt. and number of full-time teachers for 5 years	<u>View File</u>
Any additional information	<u>View File</u>

## 2.4.3 - Total teaching experience of full-time teachers in the same institution: (Full-time teachers' total teaching experience in the current institution)

#### 133

File Description	Documents
List of teachers including their PAN, designation, Department and details of their experience	<u>View File</u>
Any additional information	<u>View File</u>

#### 2.5 - Evaluation Process and Reforms

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

#### 16 DAYS

File Description	Documents
List of Programmes and the date of last semester-end / year-end examinations and the date of declaration of result	<u>View File</u>
Any additional information	<u>View File</u>

## 2.5.2 - Number of students' complaints/grievances against evaluation against the total number who appeared in the examinations during the year

112

File Description	Documents
Upload the number of complaints and total number of students who appeared for exams during the year	<u>View File</u>
Upload any additional information	<u>View File</u>

2.5.3 - IT integration and reforms in the examination procedures and processes including Continuous Internal Assessment (CIA) have brought in considerable improvement in the Examination Management System (EMS) of the Institution

Effective Examination Management System (EMS) is in place for planning and executing the conduction of examinations, assessment and declaration of results by the office of Controller of Examinations. Complete automation of Examination system has brought the advancements in the entire process of examination.

- Portal integrated with Examination Management System facilitates the faculty to manage course wise attendance and internal marks components entry.
- Students are provided with the facility to view their academic performance (Continuous Internal Assessment, Attendance and End semester examinations marks) in web portal ensures transparency

#### Examination Reforms

Reforms in the Institutional examination system are aligned with guidelines framed by AICTE under Examinations Reforms. The following are some of the significant reforms made in the Examination system

- Academic flexibility Conversion of one credit courses,
   value added courses and MOOC courses into academic credits
- Assignments/seminars/contest participation/industrial project are the part of internal assessment which keeps the students engaged throughout the course of study
- Utilization of computerized Examination Management System
- Introduction of online facilities to the students to view their academic performances
- Students provided with the option of withdrawing examinations of any semester, except first, with valid reasons. It is available for students once in the entire duration of study

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional Information	https://snsce.ac.in/coe/

#### 2.6 - Student Performance and Learning Outcomes

2.6.1 - Programme Outcomes and Course Outcomes for all Programmes offered by the institution are stated and displayed on the website and communicated to teachers and students

The syllabus for all courses is framed by the faculty members based on their expertise and discussed in Course development Committee for further enhancement. The HOD is the convener of the committee and all faculty members are part of the committee. Other stake holders like Industry expert, Subject expert give their valuable inputs for the committee. The course objectives and course outcomes framed using Bloom's Taxonomy is elaborately discussed in the meeting.

The PO's and CO's are disseminated to the students by the following methods:

- Syllabus with PO's and CO's are displayed in college website.
- Curriculum and Syllabus book with PO's, PEO's and CO's are available in department library for reference.
- PO's and PEO's are displayed at prominent places in the department including classrooms and laboratories.
- CO's are included in delivery plan, lab manuals and course files for the respective courses.
- PO's and CO's are assessed by the students at the end of course using feedback forms.
- The guidelines for framing of CO's using bloom's taxonomy are given to faculty members through IQAC meetings and other staff meetings.
- The importance of PO's and CO's is deliberated to students through an effective tutor ward system.

File Description	Documents
Upload COs for all courses (exemplars from the Glossary)	<u>View File</u>
Upload any additional information	<u>View File</u>
Link for additional Information	https://drive.google.com/file/d/1XsGBb2p6y WOrrj46xHWKaSL7iQblg5cc/view

#### 2.6.2 - Attainment of Programme Outcomes and Course Outcomes as evaluated by the institution

The Program Outcomes (POs) and Program Specific Outcomes (PSOs) are attained through a well set curriculum. Course Outcomes (COs) are defined for each course and they are mapped to POs and PSOs. The COs are assessed through a structured pattern at the end of the course through Direct Assessment methods and Indirect Assessment methods

The CO attainment is assessed directly through Internal Assessment Examination, Assignments, Lab records and Model examinations. The COs are mapped against each question and CO analysis is carried out by faculty for each course and documented in the Course File. The contributions of COs are assessed in high, moderate and low levels which in turn contributes towards the attainment of POs/PSOs.

The CO attainment is also assessed directly through Semester-end Theory Examinations where the questions in semester-end examinations are tested pertaining to all COs, in varying Blooms Taxonomy Levels.

The CO attainment is also assessed indirectly with survey forms containing questions related to each course. The course end survey form and the faculty survey form are used to assess the CO indirectly. The POs and PSOs are assessed indirectly through Exit survey forms where the final year students at the end of their graduation submit their feedback on curriculum. Also the Alumni survey forms are used to take the feedback from Alumni to assess the POs and PSOs. The Employer Survey forms are used to take the survey from the employer to measure the PO attainments.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional Information	https://snsce.ac.in/course_curriculum_ai&d_s/

#### 2.6.3 - Pass Percentage of students

### 2.6.3.1 - Total number of final year students who passed in the examinations conducted by Institution

#### 237

File Description	Documents
Upload list of Programmes and number of students appear for and passed in the final year examinations	<u>View File</u>
Upload any additional information	<u>View File</u>
Paste link for the annual report	https://snsce.ac.in/agar_2021-22/

### 2.7 - Student Satisfaction Survey

## 2.7.1 - Student Satisfaction Survey (SSS) on overall institutional performance (Institution may design its own questionnaire). Results and details need to be provided as a weblink

https://snsce.ac.in/agar 2021-22/

#### RESEARCH, INNOVATIONS AND EXTENSION

#### 3.1 - Promotion of Research and Facilities

3.1.1 - The institution's research facilities are frequently updated and there is a well-defined policy for promotion of research which is uploaded on the institutional website and implemented

#### Vision:

- • To promote research in cutting edge technologies by providing a robust platform for sharing and implementing innovative ideas.
- To facilitate exchange of information and interaction among the various research institutes and industries.

• To develop skilled researchers / problem solvers in diverse fields of engineering.

The R & D cell focuses on the following R & D activities:

Assists faculty, research scholars and students in filing research proposals for grants from various funding agencies like DST, AIC E, MHRD etc. Allocation of seed money for R & D projects in emerging areas proposed by the faculty, research scholars and students. Assists the faculty, research scholars and students in filing of IPRs like patents and copy rights. Creating awareness and motivating researchers to work in emerging domains of engineering and technology. The institute has identified seven industry verticals and five emerging technology areas to focus on. Encouraging faculty members for doing research work leading to Ph. D degree. Patent filing for innovative design and products. Signing MOU with Industries/Technical Institutions/Universities for collaborative research in latest technologies. Industrial consultancy. Publication of research papers in reputed National/ International Journals (Scopus, Web of Science and SCI Indexed Journal and International conferences. Book publication.

File Description	Documents
Upload the Minutes of the Governing Council/ Syndicate/Board of Management related to research promotion policy adoption	<u>View File</u>
Provide URL of policy document on promotion of research uploaded on the website	https://snsce.ac.in/research_and_innovation/
Any additional information	<u>View File</u>

#### 3.1.2 - The institution provides seed money to its teachers for research

## 3.1.2.1 - Seed money provided by the institution to its teachers for research during the year (INR in lakhs)

#### 11.11 Lakhs

File Description	Documents
Minutes of the relevant bodies of the institution regarding seed money	<u>View File</u>
Budget and expenditure statements signed by the Finance Officer indicating seed money provided and utilized	<u>View File</u>
List of teachers receiving grant and details of grant received	View File
Any additional information	<u>View File</u>

## ${\bf 3.1.3 - Number\ of\ teachers\ who\ were\ awarded\ national\ /\ international\ fellowship(s)\ for\ advanced\ studies/research\ during\ the\ year}$

4

File Description	Documents
e-copies of the award letters of the teachers	<u>View File</u>
List of teachers and details of their international fellowship(s)	<u>View File</u>
Any additional information	<u>View File</u>

### 3.2 - Resource Mobilization for Research

## 3.2.1 - Grants received from Government and Non-Governmental agencies for research projects, endowments, Chairs during the year (INR in Lakhs)

#### 24.88061 Lakhs

File Description	Documents
e-copies of the grant award letters for research projects sponsored by non-governmental agencies/organizations	<u>View File</u>
List of projects and grant details	<u>View File</u>
Any additional information	<u>View File</u>

### 3.2.2 - Number of teachers having research projects during the year

**57** 

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional Information	https://snsce.ac.in/research_and_innovation_n/
List of research projects during the year	<u>View File</u>

#### 3.2.3 - Number of teachers recognised as research guides

02

File Description	Documents
Upload copies of the letter of the university recognizing teachers as research guides	<u>View File</u>
Institutional data in Prescribed format	<u>View File</u>

## 3.2.4 - Number of departments having research projects funded by Government and Non-Government agencies during the year

6

File Description	Documents
Supporting document from Funding Agencies	<u>View File</u>
Paste link to funding agencies' website	https://snsce.ac.in/research_and_innovation_n/
Any additional information	<u>View File</u>

#### 3.3 - Innovation Ecosystem

3.3.1 - Institution has created an ecosystem for innovations and creation and transfer of knowledge supported by dedicated centres for research, entrepreneurship, community orientation, incubation, etc.

SNS Institutions has setup various incubators to promote innovative Ideas and entrepreneurship among the students. The objective is to promote and encourage start-ups in specific subjects/sectors and would provide them with necessary

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infrastructure facilities and other value-added services. The National Innovation and Start-up Policy 2019 for students and faculty of Higher Education Institutions (HEIs) is a guiding framework to enable the Institutes to actively engage students, faculties and staff in innovation and entrepreneurship related activities, the spirit of which is imbibed in the SNS ISP(Innovation Start up Policy). A new space ICAFE is inaugurated to involve students with startup ideas to collaborate and work with industry and academic experts. The institution has promoted a startup "DeLauto solutions proposed by Mr V.Yasith of IV year mechanical Engineering . The startup serves as a design and drafting center for manufacturing industries located in Coimbatore.

Workshops on innovation, i-Mentor for staff and i-Start for students through FORGE are arranged. Centre for Intellectual Property Rights creates awareness and promotes IP generation/transfer. (Start-ups - 09, Patents - 42), (IIC) approved by MHRD-Innovation Cell is to engage large number of faculty and students in various innovation and entrepreneurship related activities such as ideation, Problem solving, Project handling and Management at Pre-incubation/Incubation stage.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://snsce.ac.in/research_and_innovation_n/

## 3.3.2 - Number of workshops/seminars conducted on Research Methodology, Intellectual Property Rights (IPR), Entrepreneurship and Skill Development during the year

38

File Description	Documents
Report of the events	<u>View File</u>
List of workshops/seminars conducted during the year	<u>View File</u>
Any additional information	<u>View File</u>

#### 3.4 - Research Publications and Awards

#### 3.4.1 - The Institution ensures

A. All of the above

implementation of its Code of Ethics for Research uploaded in the website through the following: Research Advisory Committee Ethics Committee Inclusion of Research Ethics in the research methodology course work Plagiarism check through authenticated software

File Description	Documents
Code of Ethics for Research, Research Advisory Committee and Ethics Committee constitution and list of members of these committees, software used for plagiarism check	<u>View File</u>
Any additional information	<u>View File</u>

## 3.4.2 - Number of PhD candidates registered per teacher (as per the data given with regard to recognized PhD guides/ supervisors provided in Metric No. 3.2.3) during the year

### 3.4.2.1 - Number of PhD students registered during the year

02

File Description	Documents
URL to the research page on HEI website	https://cfr.annauniv.edu/research/academic s/supervisor-list.php?type=mech
List of PhD scholars and details like name of the guide, title of thesis, and year of registration	<u>View File</u>
Any additional information	<u>View File</u>

## 3.4.3 - Number of research papers per teacher in CARE Journals notified on UGC website during the year

22

File Description	Documents
List of research papers by title, author, department, and year of publication	<u>View File</u>
Any additional information	<u>View File</u>

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## 3.4.4 - Number of books and chapters in edited volumes / books published per teacher during the year

10

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://snsce.ac.in/research and innovation/

## 3.4.5 - Bibliometrics of the publications during the year based on average Citation Index in Scopus/ Web of Science/PubMed

### 3.4.5.1 - Total number of Citations in Scopus during the year

994

File Description	Documents
Any additional information	<u>View File</u>
Bibliometrics of the publications during the year	<u>View File</u>

## 3.4.6 - Bibliometrics of the publications during the year based on Scopus/ Web of Science – h-Index of the University

### 3.4.6.1 - h-index of Scopus during the year

16

File Description	Documents
Bibiliometrics of publications based on Scopus/ Web of Science - h-index of the Institution	<u>View File</u>
Any additional information	<u>View File</u>

### 3.5 - Consultancy

## 3.5.1 - Revenue generated from consultancy and corporate training during the year (INR in lakhs)

85.52

File Description	Documents
Audited statements of accounts indicating the revenue generated through consultancy and corporate training	<u>View File</u>
List of consultants and revenue generated by them	<u>View File</u>
Any additional information	<u>View File</u>

## 3.5.2 - Total amount spent on developing facilities, training teachers and clerical/project staff for undertaking consultancy during the year

#### 457000

File Description	Documents
Audited statements of accounts indicating the expenditure incurred on developing facilities and training teachers and staff for undertaking consultancy	<u>View File</u>
List of training programmes, teachers and staff trained for undertaking consultancy	<u>View File</u>
List of facilities and staff available for undertaking consultancy	<u>View File</u>
Any additional information	<u>View File</u>

#### 3.6 - Extension Activities

3.6.1 - Extension activities carried out in the neighbourhood sensitising students to social issues for their holistic development, and the impact thereof during the year

Extension Services benefitting the community are undertaken by NSS, RRC, YRC and the departments with an aim of achieving the Core Values of NAAC, Vision and Mission of the College and realizing the UNESCOs declaration "Learning to Live Together, Laying accessible road, forming public park and Bus Stop Shelter". The students of the college actively participate in these programmes and help them. T For community extension programme, the college provides personality development sessions and computer proficiency coaching classes for other members of society such as Government teachers, so that the society is also benefitted from these programs. Participation in the extension activities is one of

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the important criterions for the selection for Best out Going (BOG) student of the college and the department. In the performance evaluation of the faculty members, due weightage is given for participation in the extension activities.

NSS Unit-Our institution's NSS unit, in collaboration with SNS Social Responsibility Initiative and Health Department, Sarkar Samakulam has conducted awareness programs like dengue awareness, anti-drug awareness, charity fund raiser, Gaja cyclone relief activity etc.,

YRC Unit- Around 1890 students have participated in Health Awareness Rallies, Blood donation camps, road safety, celebrating life etc.,

4. RRC Unit - Individual departments, in collaboration with Native Medicare charitable trust, BRJ Ortho Centre, KMCH, Santhi Social Service etc., has organized awareness programs like Blood Donation Camp, Medical Camp, Free Eye Check-up Camp, etc

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://snsce.ac.in/research_and_innovation_n/

# 3.6.2 - Number of awards and recognition received by the Institution, its teachers and students for extension activities from Government / Government-recognised bodies during the year

34

File Description	Documents
Number of awards for extension activities in during the year	<u>View File</u>
e-copy of the award letters	<u>View File</u>
Any additional information	<u>View File</u>

## 3.6.3 - Number of extension and outreach programmes conducted by the institution through NSS/NCC/Red Cross/YRC, etc. during the year (including Government-initiated

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### programmes such as Swachh Bharat, AIDS Awareness, and Gender Sensitization and those organised in collaboration with industry, community and NGOs)

21

File Description	Documents
Reports of the events organized	<u>View File</u>
Any additional information	<u>View File</u>

### 3.6.4 - Number of students participating in extension activities listed in 3.6.3 during the year

#### 2262

File Description	Documents
Reports of the events	<u>View File</u>
Any additional information	<u>View File</u>

#### 3.7 - Collaboration

### 3.7.1 - Number of collaborative activities during the year for research/ faculty exchange/ student exchange/ internship/ on-the-job training/ project work

138

File Description	Documents
Copies of documents highlighting collaboration	<u>View File</u>
Any additional information	<u>View File</u>

3.7.2 - Number of functional MoUs with institutions of national and/or international importance, other universities, industries, corporate houses, etc. during the year (only functional MoUs with ongoing activities to be considered)

13

File Description	Documents
e-copies of the MoUs with institution/ industry/ corporate house	<u>View File</u>
Details of functional MoUs with institutions of national, international importance, other institutions etc. during the year	<u>View File</u>
Any additional information	<u>View File</u>

#### INFRASTRUCTURE AND LEARNING RESOURCES

#### 4.1 - Physical Facilities

4.1.1 - The Institution has adequate infrastructure and physical facilities for teaching-learning, viz., classrooms, laboratories, computing equipments, etc.

Enhancement of infrastructure goes hand in hand with the changing needs of the institution. Our institution has well established physical facilities like class rooms, laboratories, seminar halls, staff rooms, R & D centres, rest rooms, etc. All constructions have been taken up as per NBC rules and whenever new programs approved; suitable infrastructural expansion is in position. The classroom's interior furnished with a double-seat desk arrangement, a presentation platform, and a newspaper desk. In addition to this, every classroom contains an overhead LCD projector, display screen, desktop, speakers, LAN and Wi-Fi connectivity that largely help to convert traditional classes into ICT digital classrooms. The classes are scheduled in a way that Design Thinking curriculum is followed and implemented in both theory and Practical classes.

Our institution has well-established laboratories with modern and updated equipment's demanded by our curriculum. The institution holds a number of laboratories apart from the curriculum requirements known for their advanced technical assistance. The laboratories such as BOT lab, E-yatra lab, Texas Instruments' advanced embedded lab, electronic bank for mini projects, piston factory for designing and fabricating automobiles, product design and development centre that enables the design of innovative 3D models of mechanical components.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://snsce.ac.in/courses_cse_facilities

4.1.2 - The institution has adequate facilities for cultural activities, yoga, sports and games (indoor and outdoor) including gymnasium, yoga centre, auditorium etc.)

Our institution provides an apt environment for holistic development of students, physical, mental, cultural and academics headed by Principal, entire faculty, physical director and his team.

Exquisite Indoor sports, games and activity centre - SPINE. It is a four-story, enormous structure with elevators that serves as a comprehensive indoor activity centre with indoor swimming pool, indoor cricket pitch with automatic bowling facility, state of art modernised gymnasium with cardio and fitness equipment's. Gaming facility with Billiards, Air hockey, Foosball & Hand soccer apart from Chess and Carrom, sophisticated mini theatre, Music and recording studio, Dance Studio and for yogic exercises, Creative art room, A relaxing and networking hall.

Our outdoor sports facility comprises of Basket-Ball, Volley ball, Ball badminton, Kho-kho, Cricket, Hand ball, Kabadi, Shuttle courts apart from a Football ground and Table Tennis Hall and a grand auditorium.

Annual Cultural Summit enables students everywhere to showcase their talents in dancing, singing etc., Conduct of festivals like, Pongal, Holi, Onam and Christmas provide a ground for all-student inclusive celebrations culture, religion and states.

Various clubs such as - Youth Parliament, MUN, Coding and Web Designing, Foodies, Dance and Music, Bikers, Photography and NSS etc., By enrolling, students can choose to develop their personalities and pursue their passions.

File Description	Documents
Geotagged pictures	<u>View File</u>
Upload any additional information	<u>View File</u>
Paste link for additional information	https://snsce.ac.in/sportssnsce/

#### 4.1.3 - Number of classrooms and seminar halls with ICT-enabled facilities

39

File Description	Documents
Upload any additional information	<u>View File</u>
Upload Number of classrooms and seminar halls with ICT enabled facilities (Data Template)	<u>View File</u>

### 4.1.4 - Expenditure for infrastructure augmentation, excluding salary, during the year (INR in Lakhs)

#### 34.62626 Lakhs

File Description	Documents
Upload audited utilization statements	<u>View File</u>
Details of Expenditure, excluding salary, during the years	<u>View File</u>
Any additional information	<u>View File</u>

#### 4.2 - Library as a Learning Resource

#### 4.2.1 - Library is automated using Integrated Library Management System (ILMS)

SNS College of Engineering has enabled the library with Lips i Net (LMS) in 2003 with a perceptual license. Lips i Net is state-of-the-art integrated library management software designed and developed by the Dolphin Software Solutions, Coimbatore. The library has its own sub-LAN consisting of 7 terminals, one server to support library software, OPAC services, and other in-house computerization activities done within the library. It is user-friendly software developed to work ina client-server environment.

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The software is suitable for international standards for bibliographic formats, networking, and circulation protocols.

The basic features of Automation in circulation systems are charging, overdue controls, discharging, reserves, etc. This system should be capable to perform different jobs such as registration of library members, issuance of borrower cards, charging and discharging of documents, reminders of over dues, updating to record files, identification of items on lone, identification of items and due date slips and generating the orders for stolen books automatically, in an online computer-based circulation system, can retrieve up-to-date information immediately through the terminal. Circulation activities were computerized providing statistics on the issue and return of books. The introduction of barcode technology helped to achieve maximum efficiency in providing accuracy, speed, and reliability in issue and return procedures.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://snsce.ac.in/central_library/

# 4.2.2 - Institution has access to the following: A. Any 4 or more of the above e-journals e-ShodhSindhu Shodhganga Membership e-books Databases Remote access to e-resources

File Description	Documents
Details of subscriptions like e- journals, e-books, e- ShodhSindhu, Shodhganga membership	<u>View File</u>
Upload any additional information	<u>View File</u>

### 4.2.3 - Expenditure on purchase of books/ e-books and subscription to journals/e-journals during the year (INR in lakhs)

14.65 Lakhs

File Description	Documents
Audited statements of accounts	<u>View File</u>
Any additional information	<u>View File</u>
Details of annual expenditure for purchase of books/e-books and journals/e- journals during the year (Data Template)	<u>View File</u>

#### 4.2.4 - Usage of library by teachers and students (footfalls and login data for online access)

#### 4.2.4.1 - Number of teachers and students using the library per day during the year

427

File Description	Documents
Upload details of library usage by teachers and students	<u>View File</u>
Any additional information	<u>View File</u>

#### 4.3 - IT Infrastructure

4.3.1 - Institution has an IT policy covering Wi-Fi, cyber security, etc. and has allocated budget for updating its IT facilities

Our institution is equipped with a variety of IT facilities that are updated on a regular basis because it recognises the importance of technology in knowledge acquisition and skill development. Video conferencing, web conferencing, and e-learning are made available in smart classrooms, seminar halls, conference rooms, and ICT centres to support training programmes.

The installation of 65 Wi-Fi devices allowed for full Wi-Fi coverage throughout the entire institution. To keep an eye on things, 218 CCTV security cameras and 17 CCTV DVR were installed. To provide firewall security across the entire campus, 10 Wi-Fi access points were built. Additionally, the Sonic firewall software offers user registration, IP assignment, login, and management of time limits and bandwidth restrictions. For efficient handling of student and staff information, a centralised ERP system was installed. This makes it possible for teachers, parents, and staff to access a student's academic records, including attendance, grade, and other information

The hardware, network, intranet-related services, and Wi-Fi on campus are all monitored and maintained by a technical team. The

first line of defence against threats to Internet security and for regulating data transmission to the Internet is a Sonic firewall.

For use in the online lectures and practical's, the institute has licenced versions of Microsoft Office Suite (Microsoft Teams). An ID is provided for each faculty member and students.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://drive.google.com/file/d/1fP0T7oKt5 uNp4UBCkFjfz6LJ3E FREMk/view

#### 4.3.2 - Student - Computer ratio

Number of Students	Number of Computers
1558	988

File Description	Documents
Upload any additional information	<u>View File</u>

# 4.3.3 - Bandwidth of internet connection in the Institution and the number of students on campus

A. ?50 Mbps

File Description	Documents
Details of bandwidth available in the Institution	<u>View File</u>
Upload any additional information	<u>View File</u>

4.3.4 - Institution has facilities for e-content development: Facilities available for e-content development Media Centre Audio-Visual Centre Lecture Capturing System (LCS) Mixing equipments and software for editing

A. All four of the above

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://www.youtube.com/watch?v=UblXciJCkZ Q
List of facilities for e-content development (Data Template)	<u>View File</u>

#### 4.4 - Maintenance of Campus Infrastructure

### 4.4.1 - Expenditure incurred on maintenance of physical and academic support facilities, excluding salary component, during the year (INR in lakhs)

#### 361.47532

File Description	Documents
Audited statements of accounts	<u>View File</u>
Upload any additional information	<u>View File</u>

4.4.2 - There are established systems and procedures for maintaining and utilizing physical, academic and support facilities – classrooms, laboratory, library, sports complex, computers, etc.

For the maintenance of its physical, academic, and support facilities, the college has established a defined method and approach. A technical staff member and the faculty in charge keep an eye on the equipment's regular and periodic maintenance and operation in laboratories. The management suggests and approves depreciations and improvement needs.

The resources in the central library are routinely renewed and updated by the library administration, and an annual audit is conducted to assure their relevance and usefulness. The updating of the department library is carried out by the respective department through their annual budget. The institute offers distinctive and unique sporting facilities run by a physical director. The director of physical education frequently ensures upkeep and updating of the same through the principal.

Every classroom is enabled with ICT facilities via computers with smartboard/LCD Projectors and specially assigned technical staff supports the maintenance. The systems are updated and kept current to meet all the needs of latest technological advancement. The

cleanliness of all laboratories, sports fields, classrooms and departments are organized and routinely ensured by the maintenance department under the management of the principal through engineers and supervisors to ensure all electrical, mechanical and common infrastructure related problems are addressed immediately and maintained diligently

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://snsce.ac.in/studentslife/

#### STUDENT SUPPORT AND PROGRESSION

#### 5.1 - Student Support

### 5.1.1 - Number of students benefitted by scholarships and freeships provided by the Government during the year

1035

File Description	Documents
Upload self-attested letters with the list of students receiving scholarships	<u>View File</u>
Upload any additional information	<u>View File</u>

### 5.1.2 - Number of students benefitted by scholarships and freeships provided by the institution and non-government agencies during the year

254

File Description	Documents
Upload any additional information	<u>View File</u>
Institutional data in prescribed format	<u>View File</u>

5.1.3 - The following Capacity Development and Skill Enhancement activities are organised for improving students' capabilities Soft Skills Language and Communication Skills Life Skills (Yoga, A. All of the above

#### Physical fitness, Health and Hygiene) Awareness of Trends in Technology

File Description	Documents
Link to Institutional website	https://snsce.ac.in/5pillars/
Details of capability development and schemes	<u>View File</u>
Any additional information	<u>View File</u>

### 5.1.4 - Number of students benefitted from guidance/coaching for competitive examinations and career counselling offered by the institution during the year

#### 1438

File Description	Documents
Any additional information	<u>View File</u>
Number of students benefited by guidance for competitive examinations and career counseling during the year (Data Template)	<u>View File</u>

5.1.5 - The institution adopts the following mechanism for redressal of students' grievances, including sexual harassment and ragging: Implementation of guidelines of statutory/regulatory bodies Creating awareness and implementation of policies with zero tolerance Mechanism for submission of online/offline students' grievances Timely redressal of grievances through appropriate committees

A. All of the above

File Description	Documents
Minutes of the meetings of students' grievance redressal committee, prevention of sexual harassment committee and Anti- ragging committee	<u>View File</u>
Details of student grievances including sexual harassment and ragging cases	<u>View File</u>
Upload any additional information	<u>View File</u>

#### 5.2 - Student Progression

#### 5.2.1 - Number of outgoing students who got placement during the year

208

File Description	Documents
Self-attested list of students placed	<u>View File</u>
Upload any additional information	<u>View File</u>

#### 5.2.2 - Number of outgoing students progressing to higher education

12

File Description	Documents
Upload supporting data for students/alumni	<u>View File</u>
Details of students who went for higher education	<u>View File</u>
Any additional information	<u>View File</u>

### 5.2.3 - Number of students qualifying in state/ national/ international level examinations during the year

# 5.2.3.1 - Number of students who qualified in state/ national/ international examinations (e.g.: IIT-JAM/NET/SET/JRF/ GATE /GMAT /CAT/ GRE/ TOEFL/Civil Services/State government examinations) during the year

0

File Description	Documents
Upload supporting data for students/alumni	<u>View File</u>
Any additional information	<u>View File</u>

#### 5.3 - Student Participation and Activities

# 5.3.1 - Number of awards/medals for outstanding performance in sports and/or cultural activities at inter-university / state /national / international events (award for a team event should be counted as one) during the year

#### 16

File Description	Documents
e-copies of award letters and certificates	<u>View File</u>
Any additional information	<u>View File</u>

### 5.3.2 - Presence of an active Student Council and representation of students in academic and administrative bodies/committees of the institution

SNSCE is basically headed by the Chairman, Correspondent and Technical Director, were the Principal steers the Institution forward with an extended team of HoD, CEO, Administrative officer, Librarian and Physical Director.

The governing body is headed by the Chairman Dr. S.N.Subramanian and members of UGC, AICTE and Government of Tamilnadu and few more. Others statutory bodies of the institution are planning and monitoring committees, anti ragging committee, ICC isimplemented.

Among the major forums the Student counsel includes student's representatives and two senior faculties under the supervision of the Principal, which occurs twice a semester. On the other hand, Board of studies (BOS) has nominees from Anna university and from industry to review the autonomous curriculum/ syllabus, twice a year.

Apart from these the institution has various Associations including ISTE, SAE,ACM, IE, IET and CSI. Major clubs within the institution include MUN club, yoga club, fine arts and music club, SMILE English club, and many more. These clubs are headed by elected student secretaries. Social outreach strategy in SNSCE makes students to participate NSS, YRP, RRC activities and also promote to organize community development camps at government

schools and at socially backward forums. Seperate student coucil is functioning to take care of academic related activities..

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://snsce.ac.in/ylp/

#### 5.3.3 - Number of sports and cultural events / competitions organised by the institution

19

File Description	Documents
Report of the event	<u>View File</u>
List of sports and cultural events / competitions organised per year	<u>View File</u>
Upload any additional information	<u>View File</u>

#### 5.4 - Alumni Engagement

5.4.1 - The Alumni Association and its Chapters (registered and functional) contribute significantly to the development of the institution through financial and other support services

The SNSCE Alumni Association has 10 members as office bearers who coordinate all the events regarding alumni association. More than 3000 members are in Alumni Association. During this academic year 10 online alumni meet has been organized and discussed with various department passed out students who shared their work experience and innovative ideas. Alumni Association organized 46 online seminars for the students with various topic to enlighten the students knowledge in current trends and Technologies of various IT Industry. More than 100 members are done Internship in various companies on the reference of the Alumni Members. Alumni members are included in BOS committee for the curriculum enrichment. Alumni members gave guidelines to the Entrepreneurship cell for the upliftment of the students who wish to be an entrepreneur. Short courses on soft skills, Spoken English, Personality Development and skills to face Interview, Resume writing, Elementary Computer Courses regularly on campus not only for the students but also for unemployed graduates.

The Alumni's willful participation and voluntary contribution

(financially & non-financially) depend primarily on gratification with their learning experience in the alma mater. Their inputs also helped the institution to improve the infrastructure. A sophisticated Executive Lounge and Placement Library was setup which was partially funded by the Alumni association. Thus, the support received from Alumni benefits the students, the institution and the society. Their contributions and involvement significantly increases the reputation of the college nationally and internationally.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional Information	https://snsgroups.com/testimonials/

### **5.4.2 - Alumni's financial contribution** during the year

#### D. 2 Lakhs - 5 Lakhs

File Description	Documents
Upload any additional information	<u>View File</u>

#### GOVERNANCE, LEADERSHIP AND MANAGEMENT

#### 6.1 - Institutional Vision and Leadership

6.1.1 - The governance of the institution is reflective of an effective leadership in tune with the vision and mission of the Institution

Governance of the Institution

The institution is governed by the visionary leadership of Dr.S.N.Subbramanian, Chairman, Dr.S.Rajalakshmi, Correspondent and Technical Director, Dr.S.Nalin Vimal Kumar. Under their able leadership and guidance, the Principal, institution members are marching towards the attainment of the organisation's vision.

Effective leadership is reflected through fostering excellence in the institutional culture, infrastructure, value-added programmes, management processes, faculty expertise, and student skill sets that are continuously monitored and improved.

The institution's perspective plans focuses on providing the worldclass education to our students through the Design Thinking Curriculum, which is implemented first of its kind in India. Institution plans provide students' access to cutting-edge facilities likelaboratories, learning tools, resources, projects from Innovation hub(iHub).

Participative Management is executed in the institution through the participation of faculty to evaluate and frame prerequisites for the syllabus through Programme Advisory Committee(PAC) of the department. With the principal's approval, the committee's recommendations are forwarded to the Board of Studies(Bos), Academic Council, and Governing Council for approval and implemented.

Faculty are participative in decision-making on the new initiatives of our students' development like strengthening the teaching-learning process, introducing new value added and non-academic credit courses, designing the career tracks to enhance the students' knowledge and skills of global standards.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional Information	https://snsce.ac.in/#placement

### 6.1.2 - Effective leadership is reflected in various institutional practices such as decentralization and participative management

Decentralization and participative management are two institutional practices that demonstrate the effective leadership. The departments are decentralised and participative in its activities for the development of the students and institution.

#### **DECENTRALISATION:**

The decentralisation of departmental operations is a sign of effective leadership. The Department Heads and faculty members have the authority to create the curricula and syllabi in consultation with stakeholders and as required by the industry trends. The Value Added Courses and Non-Academic Credit Courses are decided and implemented by the departments to improve the calibre of students' knowledge and skill sets while working toward the mission. Department are completely decentralised on the Industry-Institution Partnership programs that are required to

produce the world-class technocrats.

#### PARTICIPATIVE MANAGEMENT:

Participative Management of the institution is proven through the faculty participation in the teaching learning process& implementation of the Design Thinking Framework in the institution. Ours is the first institution in India that implemented Design Thinking Curriculum. The members of the Institution have taken the Value Added Courses on design thinking on their own interest and become the Certified Trainers. This is facilitating them to strengthen the Design Thinking Concept amongst the stakeholders. Thus decentralisation and participative management practices are followed in the institution.

File Description	Documents
Upload strategic plan and deployment documents on the website	<u>View File</u>
Upload any additional information	<u>View File</u>
Paste link for additional Information	https://snsce.ac.in/dtcurriculum/#:~:text= In%20SNS%2C%20we%20strive%20to,real%20soci al%20needs%20and%20issues.

#### 6.2 - Strategy Development and Deployment

6.2.1 - The institutional Strategic/Perspective plan has been clearly articulated and implemented

The perspective plan of institution is clearly defined in the areas of Curriculum design, teaching -learning process, innovation, research and development and human resource management and development (HRM & HRD) system.

To enhance the academic activities marching towards the global excellence, Design Thinking (DT) based curriculum is implemented in SNSCE as a pioneer. The DT framework enhance the students' thirst for knowledge and innovation. The DT Based Curriculum and Framework is made up of Institutional DT-Courses, Program DT-Courses, Career DT-Courses, and Non-Academic-DT Courses.Design Thinking curriculum is based on the Five Pillars approach -Centre for Learning & Teaching(CLT), Centre for Creativity(CFC), Skill and Career Development(SCD), Industry-Institution Partnership Cell(IIPC), Social Responsibility Initiatives(SRI).

Institution also has a perspective plan through the Institution-Industry Partnership Cell with many collaborative programmes and projects that enable the studentstobe industry-ready and globally competitive. The Innovative Hub (iHub) of the institution functions are based on the 7 industry verticals and 7 innovative technologies, which provides a greater platform for the students' innovation and projects.

Institution's HRM includes an effective management system and the developmental programs. The HR of the institution are also encouraged to undergo various educational and technical courses to enhance their knowledge and skillsets.

File Description	Documents
Strategic Plan and deployment documents on the website	<u>View File</u>
Paste link for additional information	https://snsce.ac.in/dtcurriculum/
Upload any additional information	<u>View File</u>

6.2.2 - The functioning of the various institutional bodies is effective and efficient as visible from the policies, administrative set-up, appointment and service rules, procedures, etc.

#### Organogram

The Organogramof the institution clearly depicts the managerial hierarchy of the Institution.

Chairmanholds the top management position in the organogram. He guides the work force on the institutional developmental and promotional activities through Correspondentand Technical Directorwho are the guiding and motivational leaders of the institution.

Directorand Principalare on the top hierarchy holding the responsibilities of guiding the employees on all functional and developmental activities of the institution. They also ensure the smooth running of the day-to-day activities and its quality aspects. Vice-Principal supports the Principal through coordination between the Heads of the Departments, Principal and top management.

Internal Quality Assurance Cell (IQAC) is the apex body holds responsibility of ensuring the quality on the academic and non-academic activities of the teaching and non-teaching staff, students and the departments.

Vice-Principaland IQAChave the mechanism to monitor the implementation of the strategies/policies framed and the outcomes obtained through the Heads of Departments. The Tutor, Faculty Advisor, IQAC Coordinators, Faculty members and Lab-in-charges are reporting to the Heads of the Departments on these aspects on daily basis. Vice-Principal and IQAC also monitoring the functions of Librarian, R&D, Placement Cell, Skill &Career Development & Physical Director.

File Description	Documents
Paste link to Organogram on the institution webpage	https://drive.google.com/file/d/13200vwVDD 3VfqM3xrITDAANSQxTyPEa0/view?usp=sharing
Upload any additional information	<u>View File</u>
Paste link for additional Information	<u>NA</u>

# 6.2.3 - Implementation of e-governance in areas of operation: Administration Finance and Accounts Student Admission and Support Examination

#### A. All of the above

File Description	Documents
ERP (Enterprise Resource Planning) Documen	<u>View File</u>
Screen shots of user interfaces	<u>View File</u>
Details of implementation of e- governance in areas of operation	<u>View File</u>
Any additional information	<u>View File</u>

#### **6.3 - Faculty Empowerment Strategies**

6.3.1 - The institution has effective welfare measures for teaching and non-teaching staff and avenues for their career development/progression

SNSCE has effective welfare measures for the teaching and nonteaching faculty members focusing on the following main aspects under the career development and skill building.

#### FOR TEACHING FACULTY

- 1. The teaching faculy members are encouraged to do their high studies and certificate programmes in order to enhance their career development.
- 2. Faculty members are supported with the Seed money assistance from management to undertake minor projects and enhance the research and innovation.
- 1. The college provides 50 of the registration fee in addition to On Duty for faculty who are presenting the papers in National & International Conferences.
- 2. Faculty members are supported with Rs.1500 Rs.1000 cash award for paper presented Annexure I & II, Scopus indexed journals etc.
- 3. Providing Group Medical Insurance for all the members.
- 4. Faculty members are provided with Employee Provident Fund facility.
- 5. Faculty Exchange Programme
- 6. Staff club of SNSCE plays a key role in the faculty empowerment. It extend support to the employees to balance their work-life through motivational programmes and activities.
- 7. Encouraging faculty to enhance their qualification (M.Phil/Ph.D., programme).
- 8. Extending support to the children's education of the teachers in our Institution.
- 9. Group COVID Insurance Scheme.

#### FOR NON-TEACHING FACULTY

- 1. The non-teaching faculty members are encouraged to pursue advanced degrees and certificate programmes in order to advance their professional growth, and they are given permission to do so.
- 2. Medical Group Insurance
- 3. Employee Provident Fund
- 4. Staff club of SNSCE extend support to the non-teaching faculty to balance their work-life through motivational programmes and activities.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://www.snsalumni.in/collegenews/detai ls/sns-covidfamily-welfare-scheme

### **6.3.2** - Number of teachers provided with financial support to attend conferences / workshops and towards payment of membership fee of professional bodies during the year

52

File Description	Documents
Upload any additional information	<u>View File</u>
Details of teachers provided with financial support to attend conference, workshops etc during the year (Data Template)	<u>View File</u>

### 6.3.3 - Number of professional development / administrative training programmes organized by the Institution for its teaching and non-teaching staff during the year

130

File Description	Documents
Reports of the Human Resource Development Centres (UGC HRDC/ASC or other relevant centres)	<u>View File</u>
Upload any additional information	<u>View File</u>

6.3.4 - Number of teachers who have undergone online/ face-to-face Faculty Development Programmes during the year: (Professional Development Programmes, Orientation / Induction Programmes, Refresher Courses, Short-Term Course, etc.)

89

File Description	Documents
Summary of the IQAC report	<u>View File</u>
Reports of the Human Resource Development Centres (UGC ASC or other relevant centers)	<u>View File</u>
Upload any additional information	<u>View File</u>

#### 6.4 - Financial Management and Resource Mobilization

#### 6.4.1 - Institution conducts internal and external financial audits regularly

#### Internal Academic Audit

The Dean's/Head's and senior professors from other departments are allocated to conduct the academic audit twice in a year. The audit consists of the activities related to Academics, Teaching, IIPC, Research ,Exam, Training and Placement, Infrastructure, staff support, department activity, student's activity, media and alumni.

To ensure the quality of the Internal Assessment Examination (IAE), the two sets of question papers are framed by the concerned faculty member, verified by the teaching coordinator of each department, HoD concerned and forwarded to the examination cell for IAE conduction. The course coordinator meeting is conducted for each common course to ensure the course's progress, assignment evaluation process, IAE, Question paper setting, implementation of various teaching pedagogies, and seminar etc.,. The senior professor will be a coordinator of a particular common course and convene the meeting. The necessary inputs are given then and there to maintain the standard of question paper CO mapping and levels of blooms used.

#### External Academic Audit

Every year after completing all academic activities external academic audit is conducted by IQAC on inviting experts from renowned Tier I institutions to audit all the academic and administrative activities of the college.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://snsce.ac.in/iqac/

### 6.4.2 - Funds / Grants received from non-government bodies, individuals, and philanthropists during the year (not covered in Criterion III and V) (INR in lakhs)

#### 30 Lakhs

File Description	Documents
Annual statements of accounts	<u>View File</u>
Details of funds / grants received from non-government bodies, individuals, philanthropists during the year	<u>View File</u>
Any additional information	<u>View File</u>

#### 6.4.3 - Institutional strategies for mobilisation of funds and the optimal utilisation of resources

The revenues at SNS College of Engineering are raised by the tuition fees paid by students, which is in accordance withgovernment regulations and used as the primary source of revenue. These funds are generally used to support the institution's development and for the salary of the employees. The institution's consulting activities are also a source of revenue. Registration/participation fees for programmes organized by the university with external members are another source of revenue. The IQAC and the Finance department have a system in place for maintaining and auditing records at the institution.

The developmental activities of the institution include students' training programmes, value added courses, Seed Money Fund for the research work of the students and faculty. They are supported with the travelling allowance and registration fee for the participation in conference and seminars.

Cash awards for the Best Outgoing Student (BOG) award and the AllRounder Performance (ARP) Award are also given to the students. Scholarships are also available to eligible students through the institution's numerous schemes, such as the SNS Free Education

Scheme (Founder's Scholarship Scheme), concession on tuition fee for the meritorious students and financially poor students. Scholarships under Sports Quota is also provided to the students.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional Information	https://snsce.ac.in/arpscholarships/

#### 6.5 - Internal Quality Assurance System

6.5.1 - Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing quality assurance strategies and processes visible in terms of incremental improvements made during the preceding year with regard to quality (in case of the First Cycle): Incremental improvements made during the preceding year with regard to quality and post-accreditation quality initiatives (Second and subsequent cycles)

The primary goal of IQAC is to create a system for taking deliberate, consistent and catalytic action to improve the institution's academic and administrative performance. The main goal is to promote measures to improve institutional performance by implementing quality assurance practices.

#### 1. Collaborative Learning

s.

Collaborative learning by various teaching pedagogies

The college adopts more than 35 different teaching pedagogies in the categories of Experiential Learning, Participative Learning, Problem Solving Learning and ICT Based Learning. Institution with Industrial Collaborations

The institution has signed MoU with more than 230 industries to facilitate to get Internship and Internships.

Learning by Foreign University Collaborations

The college provides opportunity for faculty and students to travel internationally to have exchange program with foreign Universities. The college has signed MoU with 2 foreign universities through which 4 faculty members and 8 students have

#### made exchange programs

2. Five pillar approach is a unique initiative by the IQAC for the continuous development of faculty and students in both academic and professional career.

Outcomes Patent published: 54 Patent Granted: 02 Paper publication: 332 ARIIA: Band Performer MHRD -IIC: 4 STAR Students Placement: 93 % Students participation in various Events:

1234 AICTE -CII Survey: Platinum band

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://snsce.ac.in/5pillars/

6.5.2 - The institution reviews its teaching-learning process, structures and methodologies of operation and learning outcomes at periodic intervals through its IQAC as per norms

Regular Review of Teaching, Learning and Evaluation Process

Using design thinking framework, faculty members develop lesson plan aligned with course outcomes, which focused towards skill development of students (cognitive, sociological, and emotional).

Syllabus completion as per lesson plan is recorded in the AAA (Attendance, Assessment and Audit) logbook with details of the lesson plans specific to the topic, methodology adopted, allocated hours to handle particular topic by course handling faculty and reviewed by the Head of the department.

Group Discussions, Role play, Demonstration, Debates, students assessment, IA Tests are conducted and recorded in AAA log book after the completion of every activity and audited by respective department Head.

Bloom's Taxonomy integrates course activities and assessments that support student attainment of these outcomes. Faculty member's plan and schedule office hours to give students an opportunity to discuss in depth questions and explore points of confusion that cannot be fully addressed in class.

Curriculum was designed and developed by a team of academic leaders considering latest need of the industry and academic integrity involving various stake holders' feedback. To prepare students for Higher Education, competitive examinations, entrepreneurship development and employment, career oriented courses are offered to the students of 2019 Regulation

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://snsce.ac.in/5pillars/

6.5.3 - Quality assurance initiatives of the institution include Regular meeting of the IQAC Feedback collected, analysed and used for improvement of the institution Collaborative quality initiatives with other institution(s) Participation in NIRF Any other quality audit recognized by state, national or international agencies (such as ISO Certification)

A. Any 4 or all of the above

File Description	Documents
Paste the web link of annual reports of the Institution	https://snsce.ac.in/agar 2021-22/
Upload e-copies of accreditations and certification	<u>View File</u>
Upload details of quality assurance initiatives of the institution	<u>View File</u>
Upload any additional information	<u>View File</u>

#### INSTITUTIONAL VALUES AND BEST PRACTICES

#### 7.1 - Institutional Values and Social Responsibilities

7.1.1 - Measures initiated by the Institution for the promotion of gender equity during the year Gender sensitivity is an inherent value in the cultural ethos of the institute and its neighbouring community, as is evident by the

#### following facilities -

#### 1. Safety and Security

- Security checkpoints at all campus entries and exits.
- Extensive surveillance network with 24x7 in all floors with monitored control rooms.
- Strict implementation of Anti-Ragging and Smoking Free Campus.
- Fire extinguisher foractive fire protectionin controlling small fires.
- Separate hostels for men and women with dedicated wardens.

#### 2. Counselling

- Faculties take the role of counsellors where 20 students are counselled by each counsellor per semester. Girls are counselled if they feeling safe, motivated and treated equally by the people concerned
- Grievance Redressal Committees for staff and students
- Others Orientation Programmes for Teachers and Students.
- Medical, Moral, Career, Village and Vocation Counselling are made through camps.

#### 3. Common Rooms

• Separate common rooms are available for men and women.

#### 4.Other relevant Information

- Indoor Shuttle Court, Gymnasium and Playground
- General store and Stationary shop providing daily needs goods and stationery required by students.
- The facilities available in the SPINE block serves as the day care centre for the children of the members of faculty and staff.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional Information	https://tinyurl.com/59whzxwa

### 7.1.2 - The Institution has facilities for alternate sources of energy and energy

A. Any 4 or All of the above

conservation: Solar energy Biogas plant Wheeling to the Grid Sensor-based energy conservation Use of LED bulbs/power-efficient equipment

File Description	Documents
Geotagged Photographs	<u>View File</u>
Any other relevant information	<u>View File</u>

7.1.3 - Describe the facilities in the institution for the management of the following types of degradable and non-degradable waste (within a maximum of 200 words)

The College adopts several techniques for the management of degradable and non-degradable waste produced in the campus

Solid waste management

Liquid waste management

E-waste management

Waste recycling system

Hazardous chemicals and radioactive waste management

#### SOLID WASTE MANAGEMENT

The solid waste generated in Academic, Administrative and Hostel blocks are collected and segregated through different types of dustbins (degradable / non-degradable) kept at various places and transported to disposal sites. Wastes like used papers, used notebooks, cardboard, glass and metals are given for recycling to an external agency

LIQUID WASTE MANAGEMENT The College has channelized waste water from different blocks of the College, Hostels and Food Court to the 500 kl /day capacity Sewage Treatment Plant (STP) with an operating flow rate of 12m3 per hour in 20 hours without any stagnation. Around 175 kl/day of sewage water is treated through this STP unit.

E-WASTE MANAGEMENT Effective functioning of computer maintenance cell and Refurbishment of Computers reduce the amount of e-waste produced in the campus. The e-waste produced are disposed through a government recognized vendor M/s Green Era Recyclers,

#### Coimbatore.

WASTE RECYCLING SYSTEM Reduce and Reuse strategies adopted in the campus. Bio-recycling system of the wastes practices are Vermicomposting and use of Biogas Plant. Waste water recycling is done through Sewage Treatment Plants.

HAZARDOUS CHEMICALS AND RADIOACTIVE WASTE MANAGEMENT No Hazardous Chemicals and Radioactive Materials are used in the campus. Acids and Bases are neutralized before disposal. Disposal of used batteries is done by buy back policy with authorized vendors.

File Description	Documents
Relevant documents like agreements/MoUs with Government and other approved agencies	<u>View File</u>
Geotagged photographs of the facilities	<u>View File</u>
Any other relevant information	<u>View File</u>

# 7.1.4 - Water conservation facilities available in the Institution: Rain water harvesting Bore well /Open well recharge Construction of tanks and bunds Waste water recycling Maintenance of water bodies and distribution system in the campus

A. Any 4 or all of the above

File Description	Documents
Geotagged photographs / videos of the facilities	<u>View File</u>
Any other relevant information	<u>View File</u>

#### 7.1.5 - Green campus initiatives include

### 7.1.5.1 - The institutional initiatives for greening the campus are as follows:

- A. Any 4 or All of the above
- 1. Restricted entry of automobiles
- 2. Use of bicycles/ Battery-powered vehicles
- 3. Pedestrian-friendly pathways
- 4. Ban on use of plastic
- 5. Landscaping

File Description	Documents
Geotagged photos / videos of the facilities	<u>View File</u>
Various policy documents / decisions circulated for implementation	<u>View File</u>
Any other relevant documents	<u>View File</u>

#### 7.1.6 - Quality audits on environment and energy undertaken by the institution

- 7.1.6.1 The institution's initiatives to preserve and improve the environment and harness energy are confirmed through the following:
- A. Any 4 or all of the above

A. Any 4 or all of the above

- 1. Green audit
- 2. Energy audit
- 3. Environment audit
- **4.** Clean and green campus recognitions/awards
- **5. Beyond the campus environmental promotional activities**

File Description	Documents
Reports on environment and energy audits submitted by the auditing agency	<u>View File</u>
Certification by the auditing agency	<u>View File</u>
Certificates of the awards received	<u>View File</u>
Any other relevant information	<u>View File</u>

7.1.7 - The Institution has a disabled-friendly and barrier-free environment: Ramps/lifts for easy access to classrooms and centres Disabled-friendly washrooms Signage including tactile path lights, display boards and signposts Assistive technology and facilities for persons with disabilities: accessible website, screen-reading software, mechanized equipment, etc. Provision for enquiry and information: Human assistance,

### reader, scribe, soft copies of reading materials, screen reading, etc.

File Description	Documents
Geotagged photographs / videos of facilities	<u>View File</u>
Policy documents and brochures on the support to be provided	<u>View File</u>
Details of the software procured for providing assistance	<u>View File</u>
Any other relevant information	<u>View File</u>

7.1.8 - Describe the Institutional efforts/initiatives in providing an inclusive environment i.e. tolerance and harmony towards cultural, regional, linguistic, communal, socio-economic and other diversities (within a maximum of 200 words).

To bring the harmony towards cultural, regional, linguistic, communal, social-economic diversities, the institution is known for conducting as Pongal, Christmas, Onam and many more. Among the cultural/ religious days, Pongal is celebrated prominently by preparing a number of Pongal dishes. It is rather pursued as departmental programs whence preparing Pongal and conducting Cultural events. Various interdepartmental games and activities were also organized. The other major religious festival was Christmas, where the institution tried to promote the fundamental Christian thought of brotherhood and love through sharing gifts and presents. The institution would be decorated glamorously to welcome the day on 25 of December. Apart from this, the institution is known for gifting necessary things for the orphans and needy as to establish the idea of oneness and brotherhood.

Initiatives to Handle Socio-Economic Diversity

Economically deprived students are uplifted by providing financial support and extra-care.

Social Values are promoted through seminars/ workshops organized by clubs/committees.

Social Responsibility is built through helping during natural calamities like cyclone, Scholarship for students lost their parents due to covid.

Remedial Coaching Classes for slow learners and rural students.

Extension Activities organized to cater to the needs of the disadvantages.

Various events organised to maintain socio economic inclusivity like Public Awareness Rallies, Orphanage visits, medical camps and eye camps

File Description	Documents
Supporting documents on the information provided (as reflected in the administrative and academic activities of the Institution)	<u>View File</u>

- 7.1.9 Sensitization of students and employees of the institution to constitutional obligations: values, rights, duties and responsibilities of citizens:
- The institution inculcates constitutional values, rights and duties of each citizen to faculty and students through various extracurricular and cocurricular activities.
- · Our curriculum consists of subjects such as Professional Ethics and Human Values, Human Rights.
- · Our Institution has an active National Social Services (NSS) club for various activities.
- · Institution hoists national flag during the days of National importance and inhibits the spirit of nationalism and constitutional duties to faculty members and students.

Academic Courses and Centers Courses such as Human Rights, Clinical Engineering, ICU and Operation Theater Equipments, Legal Aspects of Business, Road Safety and Traffic Rules, Indian Constitution, Professional Ethics and Human Values, Automotive Safety and Infotronics, Internet of Things in Automotive Safety, Human Assist Devices and Implant Technology, Rehabilitation Engineering, Industrial Relations and Labor Welfare, Professional Ethics and Human Values, Essence of Indian Traditional Knowledge, Environmental Science & Engineering are offered in curriculum.

Youth Wing Club organizes various programs like alumni talk, CEO talk and young entrepreneurs talk. Women Empowerment Club addresses gender issues, legal awareness, and health and aspire to uplift women.

Volunteering Service for Medical Camp on Blood Sugar, Blood Pressure & Dermatology Consultation through Kumaran Medical Center Hospital, Coimbatore. Free Covid Vaccination Camps conducted for students, employees and public. Covid-19 Awareness Posters / Videos / brochure through digital platforms

File Description	Documents
Details of activities that inculcate values necessary to transform students into responsible citizens	<u>View File</u>
Any other relevant information	<u>View File</u>

7.1.10 - The institution has a prescribed code of conduct for students, teachers, administrators and other staff and conducts periodic sensitization programmes in this regard: The Code of Conduct is displayed on the website There is a committee to monitor adherence to the Code of Conduct Institution organizes professional ethics programmes for students, teachers, administrators and other staff Annual awareness programmes on the Code of Conduct are organized

A. All of the above

File Description	Documents
Code of Ethics - policy document	<u>View File</u>
Details of the monitoring committee composition and minutes of the committee meeting, number of programmes organized, reports on the various programmes, etc. in support of the claims	<u>View File</u>
Any other relevant information	<u>View File</u>

7.1.11 - Institution celebrates / organizes national and international commemorative days, events and festivals

The institution is known for conducting and organizing various national and international day celebrations in the campus. Most prominent among them are Independence Day, Republic Day, Consumer day, yoga day and other such events.

As a means of transcending national ideologies, patriotism, nationalism the Institute efficiently undertakes the pleasure of organizing Independence Day and Republic day within the magnificent campus. On those days, as a part of celebration the institution invites various venerable personalities whose virtue and presence stimulate the nationalistic concepts upon the students. The major part of the function involves flag hoisting, dignitaries' speech, and programs for recollecting national leaders and so on.

The prominent yet notable international day celebration of the institution is Yoga day celebration. Apart from other celebrations, this day intakes the participation of all members of the institution, the students, teaching and non- teaching staffs, management and office staffs and everyone else. The basic strategy of celebrating the yoga day with mass participation was to recreate a pleasantly and healthy physique among us that pervades a positive aura around the campus atmosphere.

Promotion towards Innovation Our institution also promotes awareness of innovation to the students by following World Science Day, World Computer Literacy Day, National Science day, National Reading Day, World Bicycle day, International Air Traffic Controllers Day, International Civil Aviation Day by creating awareness programs related to the latest technology.

File Description	Documents
Annual report of the celebrations and commemorative events for during the year	<u>View File</u>
Geotagged photographs of some of the events	<u>View File</u>
Any other relevant information	<u>View File</u>

#### 7.2 - Best Practices

7.2.1 - Provide the weblink on the Institutional website regarding the Best practices as per the prescribed format of NAAC

Best Practice - 1

Activity Based Student Centric Teaching Learning - Case Study Videos, Demonstrations and Outbound Trainings

Objectives of the Practice

The objectives of this initiative are to: Implement activity-based learning to voluntarily engross the students in learning process.

Prove students with a relevant opportunity to make theory into practice through demo models.

Enable them to have a research approach to generate in-depth, multi-faceted understanding of complex issues in its real-life context.

Best Practice - 2

Industry Based Curriculum

Objectives of the Practice

The objectives of this initiative are: To innovate upon and refresh the curriculum to reflect the latest developments in technology and trends within industry. To integrate pure academics and pervasive industry engagement.

To enhance learning by incorporating experimental and experiential learning.

The Context The institute always aims to have a good interaction with the industry, and believes that the gap between industrial need and academia could be bridged by regular interaction with the industry. This is attained by Design of industry based curriculum, development of laboratories in collaboration with industries and also by vouching the syllabus from the industrial members Establishing industry interaction through Industry Institute Participation Cell[IIPC] Imparting in-plant training/internship/industrial training to students and faculty members at industries Inviting more people from industry to deliver Guest lectures Conduct workshops/Seminars/FDPs/STTPs in association with industry Industrial Projects and Consultancy works.

File Description	Documents
Best practices in the Institutional website	https://snsce.ac.in/agar 2021-22/
Any other relevant information	https://snsce.ac.in/iqac/

#### 7.3 - Institutional Distinctiveness

7.3.1 - Highlight the performance of the institution in an area distinct to its priority and thrust (within a maximum of 200 words)

Our five pillar approach namely Centre for Learning and Teaching (CLT), Centre for Creativity (CFC), Skill and Career Development (SCD), Industry Institute Partnership Cell (IIPC) and Social Responsibility Initiative (SRI) provides a learning environment that focuses on building a culture focusing on effective teaching and learning, innovation, skill and entrepreneurship development, industry connection, and social responsibility initiatives.

The DT based curriculum focus on the latest technologies and industrial verticals which SNS College of Engineering is religiously following. The seven technologies include Robotics and Automation, AR/VR/Metaverse, Data Science / AI/ML, IoT, Communication and Growth Tech, 3D Printing, Low Code Development and the seven industry verticals include Smart City, Health Care, Agriculture and Food Technology, Automobile, Aerospace, Retail, Power and Energy.

The curriculum includes institutional DT courses, Program specific DT courses and Career based DT courses. The uniqueness in DT curriculum is evident by how the career based courses are famed. A foreign language is offered for the students to meet the global needs. To become industry ready graduates, the curriculum offers all 5 latest technology skill based tools which may be offered in curriculum or through MOOC platform.

Through DT activation hour, first 30 minutes of class time is dedicated to teach and practice by students on the ancient holy books, Meditation and Yoga on daily basis.

#### Part B

#### **CURRICULAR ASPECTS**

#### 1.1 - Curriculum Design and Development

1.1.1 - Curricula developed and implemented have relevance to the local, national, regional and global developmental needs which are reflected in Programme Outcomes (POs), Programme Specific Outcomes (PSOs) and Course Outcomes (COs) of the various Programmes offered by the Institution.

The curriculum have been formulated in accordance with the guidelines of AICTE, affiliating university and in alignment with the vision and mission of the Institution. Considering the technology enabled development the graduate attributes and Program Educational Outcomes(PEOs) are designed, based on which Program Outcomes(POs) and Program Specific Outcomes(PSOs) are charted out.

The curriculum is developed in such a way that more emphasis is made on student centric learning. the objective is to create technical knowledge incorporated with science and technology enabled development among the students community. The design thinking curriculum is implemented with activity based learning, research and outreach activities which led the institutions to reach potential excellence. The curriculum covers multiple facets by promoting higher order thinking through analyzing, evaluating concepts, processes, procedures and principles in education. The course outcomes are designed in line with the revised Bloom's Taxonomy.

Structured committees at the department level (BOS) and at the institute level (Academic Council) with domain experts from reputed organizations/industry formulate the syllabi for all the disciplines'. Student feedback through course end survey is considered for the updations during the revisions to the curriculum. The institute autonomy provides Academic Flexibility to introduce new courses for overall development and up gradation to the current industry needs. The choice-based credit system adopted in the institute has given scope to the students to learn cross domain subjects/technologies and take up inter-disciplinary project work for the development of rounded personality.

File Description	Documents
Upload additional information, if any	<u>View File</u>
Link for additional information	
	https://snsce.ac.in/coe/

### 1.1.2 - Number of Programmes where syllabus revision was carried out during the year

4

File Description	Documents
Minutes of relevant Academic Council/BOS meeting	<u>View File</u>
Details of syllabus revision during the year	<u>View File</u>
Any additional information	<u>View File</u>

# 1.1.3 - Number of courses focusing on employability/entrepreneurship/ skill development offered by the Institution during the year

235

File Description	Documents
Curriculum / Syllabus of such courses	<u>View File</u>
Minutes of the Boards of Studies/ Academic Council meetings with approval for these courses	<u>View File</u>
MoUs with relevant organizations for these courses, if any	<u>View File</u>
Any additional information	<u>View File</u>

### 1.2 - Academic Flexibility

### 1.2.1 - Number of new courses introduced across all programmes offered during the year

238

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File Description	Documents
Minutes of relevant Academic Council/BoS meetings	<u>View File</u>
Any additional information	<u>View File</u>
Institutional data in prescribed format (Data Template)	<u>View File</u>

# 1.2.2 - Number of Programmes offered through Choice Based Credit System (CBCS)/Elective Course System

### 13

File Description	Documents
Minutes of relevant Academic Council/BoS meetings	<u>View File</u>
Any additional information	<u>View File</u>
List of Add on /Certificate programs (Data Template)	<u>View File</u>

### 1.3 - Curriculum Enrichment

1.3.1 - Institution integrates cross-cutting issues relevant to Professional Ethics, Gender, Human Values, Environment and Sustainability, and Human Values into the curriculum

Courses to address Environment and Sustainability

The curriculum includes various courses that address Environment, concern for environment, awareness on hazards for environment. For example, the courses Environmental Science, Environmental and social impact assessment, green building design, waste water treatment, Air pollution and control engineering, disaster management and green computing are included as electives to address Environment and Sustainability.

Courses to address Human Values and Professional Ethics

The curriculum includes various courses to address Professional Ethics and Human Values, which teaches social development to the course Indian Constitution, Professional Ethics in Engineering, human rights, global culture and global business ethics and law.

As a part of Social Responsibility Initiatives (SRI) our

institution conducts various activities such as SANTA 365,
Neighborhood School Program, Blood Donation Camp, Dental Camp,
Anti -Drug Day, Swachh Bharat, Road Cleaning, Relief Camp, UBA,
AIDS Rally, Health Check-Up, Eye Camp, Make A Wish, Performance
Evaluation Test, Talent Hunt & Talent Competition for
identifying and recognizing the young talents from all over
Tamil Nadu. It is a promise that everyone should contribute for
the society while working for the social, cultural and,
ecological causes.

### Gender Issues

The learning culture provides various opportunity for students to demonstrate professional behavior. The Women Empowerment Cell and the Anti-sexual harassment committee continuously offer various events like Seminar, panel discussions on gender sensitization. The impact of these programs is evident through the confidence portrayed by all students irrespective of their gender.

File Description	Documents
Upload the list and description of the courses which address issues related to Gender, Environment and Sustainability, Human Values and Professional Ethics in the curriculum	<u>View File</u>
Any additional information	<u>View File</u>

# 1.3.2 - Number of value-added courses for imparting transferable and life skills offered during the year

### 21

File Description	Documents
List of value-added courses	<u>View File</u>
Brochure or any other document relating to value-added courses	<u>View File</u>
Any additional information	<u>View File</u>

### 1.3.3 - Number of students enrolled in the courses under 1.3.2 above

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### 1348

File Description	Documents
List of students enrolled	<u>View File</u>
Any additional information	<u>View File</u>

### 1.3.4 - Number of students undertaking field work/projects/ internships / student projects

### 859

File Description	Documents
List of programmes and number of students undertaking field projects / internships / student projects	<u>View File</u>
Any additional information	<u>View File</u>

### 1.4 - Feedback System

### 1.4.1 - Structured feedback and review of the syllabus (semester-wise / year-wise) is obtained from 1) Students 2) Teachers 3) Employers and 4) Alumni

### A. All 4 of the above

File Description	Documents
Provide the URL for stakeholders' feedback report	https://snsce.ac.in/agar_2021-22/
Upload the Action Taken Report of the feedback as recorded by the Governing Council / Syndicate / Board of Management	<u>View File</u>
Any additional information	<u>View File</u>

# **1.4.2 - The feedback system of the Institution comprises the following**

A. Feedback collected, analysed and action taken made available on the website

File Description	Documents
Provide URL for stakeholders' feedback report	https://snsce.ac.in/agar 2021-22/
Any additional information	<u>View File</u>

### TEACHING-LEARNING AND EVALUATION

### 2.1 - Student Enrollment and Profile

### 2.1.1 - Enrolment of Students

### 2.1.1.1 - Number of students admitted (year-wise) during the year

676

File Description	Documents
Any additional information	<u>View File</u>
Institutional data in prescribed format	<u>View File</u>

# 2.1.2 - Number of seats filled against reserved categories (SC, ST, OBC, Divyangjan, etc.) as per the reservation policy during the year (exclusive of supernumerary seats)

676

File Description	Documents
Any additional information	<u>View File</u>
Number of seats filled against seats reserved (Data Template)	<u>View File</u>

### 2.2 - Catering to Student Diversity

2.2.1 - The institution assesses students' learning levels and organises special programmes for both slow and advanced learners.

The student's data base was analyzed based on the internal exam marks, submission of assignment, class room interaction, curricular and co-curricular activities. Based on the analysis, students are categorized like slow learners, medium learners and advanced learners.

Activities for Slow Learners

Course teachers incessantly take care and periodically monitor the performance of slow learners through the following activities

Remedial classes after college hours & Question bank for easy preparation

Learning from Peer Groups

Interaction with parents on the performance of their wards

Special attention on Mathematics courses & English for Tamil medium students

Effective mentorship to resolve the difficulties faced by the slow learners

Activities for Advanced Learners

Advanced Learners are provided with the flexibility of completing their Eighth semester courses in fast track mode, that enables them to undergo full time internship. Advanced learners are encouraged to develop, National Level technical contests such as Smart India Hackathon, Codevita/go-kart/e-kart. Technology Business Incubator (TBI) programs (FORGE), Entrepreneurship Activities.

Additionally, students are given professional trainings on latest technologies, GATE, GRE, TOEFL and Foreign language (German, French, Japanese) to get certifications. The awards such as Best Outgoing student, outstanding student of the department and All Round Performer are awarded every year during the Annual day.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://snsce.ac.in/5pillars/

### 2.2.2 - Student - Teacher (full-time) ratio

Year	Number of Students	Number of Teachers
02/06/2021	1558	133

File Description	Documents
Upload any additional information	<u>View File</u>

### 2.3 - Teaching- Learning Process

2.3.1 - Student-centric methods such as experiential learning, participative learning and problem-solving methodologies are used for enhancing learning experiences:

The Institution has adopted student centric pedagogies to enhance student engagement as a part of Experiential Learning, Participative Learning and Problem Solving

Experiential Learning Experiential learning is an engaged learning process whereby students "Learn by Doing". Some of the experiential methods practiced in the institution are

Mini Project - Empathy study and effective application of theoretical concepts

Capstone Project-One projects during their last semester which helps to apply what they have learnt during their study of the program

Industrial Projects - Projects done for real industrial problems Simulation- Makes understanding more clear because of visualization

Industrial Visits - Gives a real world experience of workplace

Students' active participation in learning inside the campus is ensured with the support of various activities such as group discussion, brainstorming, role play, peer group learning and flipped classroom. Participation and showcasing the students' talent in top industrial contests such as Code Debugging, Hackathon, Ideathon, Go-Kart/E-Kart, CodeVita etc.

Problem Solving Methodologies

The students are made to observe, understand, analyze, interpret find solutions, and perform applications that lead to a holistic understanding of the concept. Some of the methods followed are,

Tutorials - Students work in groups/individual to solve problems with the help of a teacher

Case Studies - Analyzing a case enable the students to understand the nuances of the problem and apply their knowledge and skill to solve it. Group Assignments - Solving problem in groups by mutual sharing and collective wisdom.

File Description	Documents
Upload any additional information	<u>View File</u>
Link for additional Information	https://snsce.ac.in/studentslife/

# 2.3.2 - Teachers use ICT-enabled tools including online resources for effective teaching and learning

Information and Communication Technology (ICT) enabled classrooms in SNSCE are equipped with facilities like LCD projectors, Internet etc., to enable the students to visualize the concepts being taught. This enhance the learning experience of the students and understand the concepts better.

Students are also encouraged to take Assignments, Case studies and Seminars for inculcating critical thinking in the learning process. CLT (Center for Learning and Teaching) provides faculty with guidance and support to be effective as teachers and mentors and also creating an educational space that promotes excellence and innovation in teaching communities.

Student-centric learning activities such as puzzles solving, role play, analogy, project/ problem based learning, seminar on recent trends, quiz, online tests, brainstorming, tutorials, case study, group discussion and mind map techniques have been practiced for better understanding of the students. Student-centric learning facilities such as SNS courseware, NPTEL or Video based presentations, ICT enabled Class rooms, Online multiple choice questions, webinars and remote learning through online resources are created for student's access at any time

Students are encouraged to use ICT in all their presentation and they are encouraged to participate in inter-departmental and inter-collegeate competitions in co-curricular activities.

File Description	Documents
Provide link for webpage describing ICT enabled tools including online resources for effective teaching and learning process	https://www.snscourseware.org/snscenew/
Upload any additional information	<u>View File</u>

### 2.3.3 - Ratio of students to mentor for academic and other related issues

### 2.3.3.1 - Number of mentors

### 133

File Description	Documents
Upload year-wise number of students enrolled and full-time teachers on roll	<u>View File</u>
Circulars with regard to assigning mentors to mentees	<u>View File</u>

### 2.3.4 - Preparation and adherence to Academic Calendar and Teaching Plans by the institution

Academic calender is prepared with the inputs received from all stake holders and also in line with the schedules announced by the affiliating University, College Handbook and Calendar is prepared and released at the beginning of every academic year and distributed to all stake holders. Every semester each department prepares their tentative plan of action such as lesson plan, content beyond syllabus, identifying and fixing experts for guest lectures on required topics, preparation of models, charts etc. and displays the same in the respective notice boards.

Academic calendar also paves way for the faculty members to undergo training programs, if required, for effective knowledge dissemination. For students they will be able to plan their Industrial visits during the academic year, internships and inplant training during vacation. With the tentative schedule of Internal Examinations, it is possible for them to prepare well ahead of the examinations.

File Description	Documents
Upload the Academic Calendar and Teaching Plans during the year	<u>View File</u>

### 2.4 - Teacher Profile and Quality

### 2.4.1 - Number of full-time teachers against sanctioned posts during the year

133

File Description	Documents
Year-wise full-time teachers and sanctioned posts for the year	<u>View File</u>
List of the faculty members authenticated by the Head of HEI	<u>View File</u>
Any additional information	<u>View File</u>

# 2.4.2 - Number of full-time teachers with PhD/ D.M. / M.Ch. / D.N.B Super-Specialty / DSc / DLitt during the year

20

File Description	Documents
List of number of full-time teachers with PhD./ D.M. / M.Ch. / D.N.B Super-Specialty / D.Sc. / D.Litt. and number of full-time teachers for 5 years	<u>View File</u>
Any additional information	<u>View File</u>

# 2.4.3 - Total teaching experience of full-time teachers in the same institution: (Full-time teachers' total teaching experience in the current institution)

133

File Description	Documents
List of teachers including their PAN, designation, Department and details of their experience	<u>View File</u>
Any additional information	<u>View File</u>

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### 2.5 - Evaluation Process and Reforms

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

### 16 DAYS

File Description	Documents
List of Programmes and the date of last semester-end / year-end examinations and the date of declaration of result	<u>View File</u>
Any additional information	<u>View File</u>

# 2.5.2 - Number of students' complaints/grievances against evaluation against the total number who appeared in the examinations during the year

### 112

File Description	Documents
Upload the number of complaints and total number of students who appeared for exams during the year	<u>View File</u>
Upload any additional information	<u>View File</u>

# 2.5.3 - IT integration and reforms in the examination procedures and processes including Continuous Internal Assessment (CIA) have brought in considerable improvement in the Examination Management System (EMS) of the Institution

Effective Examination Management System (EMS) is in place for planning and executing the conduction of examinations, assessment and declaration of results by the office of Controller of Examinations. Complete automation of Examination system has brought the advancements in the entire process of examination.

- Portal integrated with Examination Management System facilitates the faculty to manage course wise attendance and internal marks components entry.
- Students are provided with the facility to view their academic performance (Continuous Internal Assessment, Attendance and End semester examinations marks) in web portal ensures transparency

### Examination Reforms

Reforms in the Institutional examination system are aligned with guidelines framed by AICTE under Examinations Reforms. The following are some of the significant reforms made in the Examination system

- Academic flexibility Conversion of one credit courses, value added courses and MOOC courses into academic credits
- Assignments/seminars/contest participation/industrial project are the part of internal assessment which keeps the students engaged throughout the course of study
- Utilization of computerized Examination Management System
- Introduction of online facilities to the students to view their academic performances
- Students provided with the option of withdrawing examinations of any semester, except first, with valid reasons. It is available for students once in the entire duration of study

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional Information	https://snsce.ac.in/coe/

### 2.6 - Student Performance and Learning Outcomes

2.6.1 - Programme Outcomes and Course Outcomes for all Programmes offered by the institution are stated and displayed on the website and communicated to teachers and students

The syllabus for all courses is framed by the faculty members based on their expertise and discussed in Course development Committee for further enhancement. The HOD is the convener of the committee and all faculty members are part of the committee. Other stake holders like Industry expert, Subject expert give their valuable inputs for the committee. The course objectives and course outcomes framed using Bloom's Taxonomy is elaborately discussed in the meeting.

The PO's and CO's are disseminated to the students by the following methods:

- Syllabus with PO's and CO's are displayed in college website.
- Curriculum and Syllabus book with PO's, PEO's and CO's are available in department library for reference.
- PO's and PEO's are displayed at prominent places in the department including classrooms and laboratories.
- CO's are included in delivery plan, lab manuals and course files for the respective courses.
- PO's and CO's are assessed by the students at the end of course using feedback forms.
- The guidelines for framing of CO's using bloom's taxonomy are given to faculty members through IQAC meetings and other staff meetings.
- The importance of PO's and CO's is deliberated to students through an effective tutor ward system.

File Description	Documents
Upload COs for all courses (exemplars from the Glossary)	<u>View File</u>
Upload any additional information	<u>View File</u>
Link for additional Information	https://drive.google.com/file/d/1XsGBb2p6 yWOrrj46xHWKaSL7iOblg5cc/view

# 2.6.2 - Attainment of Programme Outcomes and Course Outcomes as evaluated by the institution

The Program Outcomes (POs) and Program Specific Outcomes (PSOs) are attained through a well set curriculum. Course Outcomes (COs) are defined for each course and they are mapped to POs and PSOs. The COs are assessed through a structured pattern at the end of the course through Direct Assessment methods and Indirect Assessment methods

The CO attainment is assessed directly through Internal Assessment Examination, Assignments, Lab records and Model examinations. The COs are mapped against each question and CO analysis is carried out by faculty for each course and documented in the Course File. The contributions of COs are assessed in high, moderate and low levels which in turn contributes towards the attainment of POs/PSOs.

The CO attainment is also assessed directly through Semesterend Theory Examinations where the questions in semester-end examinations are tested pertaining to all COs, in varying Blooms Taxonomy Levels.

The CO attainment is also assessed indirectly with survey forms containing questions related to each course. The course end survey form and the faculty survey form are used to assess the CO indirectly. The POs and PSOs are assessed indirectly through Exit survey forms where the final year students at the end of their graduation submit their feedback on curriculum. Also the Alumni survey forms are used to take the feedback from Alumni to assess the POs and PSOs. The Employer Survey forms are used to take the survey from the employer to measure the PO attainments.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional Information	https://snsce.ac.in/course_curriculum_ai& ds/

### 2.6.3 - Pass Percentage of students

# 2.6.3.1 - Total number of final year students who passed in the examinations conducted by Institution

237

File Description	Documents
Upload list of Programmes and number of students appear for and passed in the final year examinations	<u>View File</u>
Upload any additional information	<u>View File</u>
Paste link for the annual report	https://snsce.ac.in/agar_2021-22/

### 2.7 - Student Satisfaction Survey

### 2.7.1 - Student Satisfaction Survey (SSS) on overall institutional performance (Institution

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### may design its own questionnaire). Results and details need to be provided as a weblink

https://snsce.ac.in/agar 2021-22/

### RESEARCH, INNOVATIONS AND EXTENSION

### 3.1 - Promotion of Research and Facilities

3.1.1 - The institution's research facilities are frequently updated and there is a well-defined policy for promotion of research which is uploaded on the institutional website and implemented

### Vision:

- • To promote research in cutting edge technologies by providing a robust platform for sharing and implementing innovative ideas.
- To facilitate exchange of information and interaction among the various research institutes and industries.
- To develop skilled researchers / problem solvers in diverse fields of engineering.

The R & D cell focuses on the following R & D activities:

Assists faculty, research scholars and students in filing research proposals for grants from various funding agencies like DST, AIC E, MHRD etc. Allocation of seed money for R & D projects in emerging areas proposed by the faculty, research scholars and students. Assists the faculty, research scholars and students in filing of IPRs like patents and copy rights. Creating awareness and motivating researchers to work in emerging domains of engineering and technology. The institute has identified seven industry verticals and five emerging technology areas to focus on. Encouraging faculty members for doing research work leading to Ph. D degree. Patent filing for innovative design and products. Signing MOU with Industries/Technical Institutions/Universities for collaborative research in latest technologies. Industrial consultancy. Publication of research papers in reputed National/ International Journals (Scopus, Web of Science and SCI Indexed Journal and International conferences. Book publication.

File Description	Documents
Upload the Minutes of the Governing Council/ Syndicate/Board of Management related to research promotion policy adoption	<u>View File</u>
Provide URL of policy document on promotion of research uploaded on the website	https://snsce.ac.in/research_and_innovation_on/
Any additional information	<u>View File</u>

### 3.1.2 - The institution provides seed money to its teachers for research

# 3.1.2.1 - Seed money provided by the institution to its teachers for research during the year (INR in lakhs)

### 11.11 Lakhs

File Description	Documents
Minutes of the relevant bodies of the institution regarding seed money	<u>View File</u>
Budget and expenditure statements signed by the Finance Officer indicating seed money provided and utilized	<u>View File</u>
List of teachers receiving grant and details of grant received	<u>View File</u>
Any additional information	<u>View File</u>

# ${\bf 3.1.3 - Number\ of\ teachers\ who\ were\ awarded\ national\ /\ international\ fellowship(s)\ for\ advanced\ studies/research\ during\ the\ year}$

advanced studies/research during the year		
4		

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File Description	Documents
e-copies of the award letters of the teachers	<u>View File</u>
List of teachers and details of their international fellowship(s)	<u>View File</u>
Any additional information	<u>View File</u>

### 3.2 - Resource Mobilization for Research

# 3.2.1 - Grants received from Government and Non-Governmental agencies for research projects, endowments, Chairs during the year (INR in Lakhs)

### 24.88061 Lakhs

File Description	Documents
e-copies of the grant award letters for research projects sponsored by non- governmental agencies/organizations	View File
List of projects and grant details	View File
Any additional information	<u>View File</u>

### 3.2.2 - Number of teachers having research projects during the year

57

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional Information	https://snsce.ac.in/research and innovation/
List of research projects during the year	<u>View File</u>

### 3.2.3 - Number of teachers recognised as research guides

02

File Description	Documents
Upload copies of the letter of the university recognizing teachers as research guides	<u>View File</u>
Institutional data in Prescribed format	<u>View File</u>

# 3.2.4 - Number of departments having research projects funded by Government and Non-Government agencies during the year

6

File Description	Documents
Supporting document from Funding Agencies	<u>View File</u>
Paste link to funding agencies' website	https://snsce.ac.in/research and innovation/
Any additional information	<u>View File</u>

### 3.3 - Innovation Ecosystem

3.3.1 - Institution has created an ecosystem for innovations and creation and transfer of knowledge supported by dedicated centres for research, entrepreneurship, community orientation, incubation, etc.

SNS Institutions has setup various incubators to promote innovative Ideas and entrepreneurship among the students. The objective is to promote and encourage start-ups in specific subjects/sectors and would provide them with necessary infrastructure facilities and other value-added services. The National Innovation and Start-up Policy 2019 for students and faculty of Higher Education Institutions (HEIs) is a guiding framework to enable the Institutes to actively engage students, faculties and staff in innovation and entrepreneurship related activities, the spirit of which is imbibed in the SNS ISP(Innovation Start up Policy). A new space ICAFE is inaugurated to involve students with startup ideas to collaborate and work with industry and academic experts. The institution has promoted a startup " DeLauto solutions proposed by Mr V. Yasith of IV year mechanical Engineering . The startup serves as a design and drafting center for manufacturing industries located in Coimbatore.

Workshops on innovation, i-Mentor for staff and i-Start for students through FORGE are arranged. Centre for Intellectual Property Rights creates awareness and promotes IP generation/transfer. (Start-ups - 09, Patents - 42), (IIC) approved by MHRD-Innovation Cell is to engage large number of faculty and students in various innovation and entrepreneurship related activities such as ideation, Problem solving, Project handling and Management at Pre-incubation/Incubation stage.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://snsce.ac.in/research and innovation/

# 3.3.2 - Number of workshops/seminars conducted on Research Methodology, Intellectual Property Rights (IPR), Entrepreneurship and Skill Development during the year

38

File Description	Documents
Report of the events	<u>View File</u>
List of workshops/seminars conducted during the year	<u>View File</u>
Any additional information	<u>View File</u>

### 3.4 - Research Publications and Awards

3.4.1 - The Institution ensures	A. All of the above
implementation of its Code of Ethics for	
Research uploaded in the website through	
the following: Research Advisory	
<b>Committee Ethics Committee Inclusion of</b>	
Research Ethics in the research	
methodology course work Plagiarism check	
through authenticated software	

File Description	Documents
Code of Ethics for Research, Research Advisory Committee and Ethics Committee constitution and list of members of these committees, software used for plagiarism check	<u>View File</u>
Any additional information	<u>View File</u>

# 3.4.2 - Number of PhD candidates registered per teacher (as per the data given with regard to recognized PhD guides/ supervisors provided in Metric No. 3.2.3) during the year

### 3.4.2.1 - Number of PhD students registered during the year

02

File Description	Documents
URL to the research page on HEI website	https://cfr.annauniv.edu/research/academi cs/supervisor-list.php?type=mech
List of PhD scholars and details like name of the guide, title of thesis, and year of registration	<u>View File</u>
Any additional information	<u>View File</u>

# 3.4.3 - Number of research papers per teacher in CARE Journals notified on UGC website during the year

22

File Description	Documents
List of research papers by title, author, department, and year of publication	<u>View File</u>
Any additional information	<u>View File</u>

# 3.4.4 - Number of books and chapters in edited volumes / books published per teacher during the year

10

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://snsce.ac.in/research_and_innovation_on/

# 3.4.5 - Bibliometrics of the publications during the year based on average Citation Index in Scopus/ Web of Science/PubMed

### 3.4.5.1 - Total number of Citations in Scopus during the year

### 994

File Description	Documents
Any additional information	<u>View File</u>
Bibliometrics of the publications during the year	<u>View File</u>

# 3.4.6 - Bibliometrics of the publications during the year based on Scopus/ Web of Science – h-Index of the University

### 3.4.6.1 - h-index of Scopus during the year

16

File Description	Documents
Bibiliometrics of publications based on Scopus/ Web of Science - h-index of the Institution	<u>View File</u>
Any additional information	<u>View File</u>

### 3.5 - Consultancy

# 3.5.1 - Revenue generated from consultancy and corporate training during the year (INR in lakhs)

85.52

File Description	Documents
Audited statements of accounts indicating the revenue generated through consultancy and corporate training	<u>View File</u>
List of consultants and revenue generated by them	<u>View File</u>
Any additional information	<u>View File</u>

# 3.5.2 - Total amount spent on developing facilities, training teachers and clerical/project staff for undertaking consultancy during the year

457000

File Description	Documents
Audited statements of accounts indicating the expenditure incurred on developing facilities and training teachers and staff for undertaking consultancy	<u>View File</u>
List of training programmes, teachers and staff trained for undertaking consultancy	<u>View File</u>
List of facilities and staff available for undertaking consultancy	<u>View File</u>
Any additional information	<u>View File</u>

### 3.6 - Extension Activities

3.6.1 - Extension activities carried out in the neighbourhood sensitising students to social issues for their holistic development, and the impact thereof during the year

Extension Services benefitting the community are undertaken by NSS, RRC, YRC and the departments with an aim of achieving the Core Values of NAAC, Vision and Mission of the College and realizing the UNESCOs declaration "Learning to Live Together, Laying accessible road, forming public park and Bus Stop Shelter". The students of the college actively participate in these programmes and help them. T For community extension programme, the college provides personality development sessions and computer proficiency coaching classes for other members of society such as Government teachers, so that the

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society is also benefitted from these programs. Participation in the extension activities is one of the important criterions for the selection for Best out Going (BOG) student of the college and the department. In the performance evaluation of the faculty members, due weightage is given for participation in the extension activities.

NSS Unit-Our institution's NSS unit, in collaboration with SNS Social Responsibility Initiative and Health Department, Sarkar Samakulam has conducted awareness programs like dengue awareness, anti-drug awareness, charity fund raiser, Gaja cyclone relief activity etc.,

YRC Unit- Around 1890 students have participated in Health Awareness Rallies, Blood donation camps, road safety, celebrating life etc.,

4. RRC Unit - Individual departments, in collaboration with Native Medicare charitable trust, BRJ Ortho Centre, KMCH, Santhi Social Service etc., has organized awareness programs like Blood Donation Camp, Medical Camp, Free Eye Check-up Camp, etc

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://snsce.ac.in/research_and_innovation_on/

3.6.2 - Number of awards and recognition received by the Institution, its teachers and students for extension activities from Government / Government-recognised bodies during the year

34

File Description	Documents
Number of awards for extension activities in during the year	<u>View File</u>
e-copy of the award letters	<u>View File</u>
Any additional information	<u>View File</u>

3.6.3 - Number of extension and outreach programmes conducted by the institution through NSS/NCC/Red Cross/YRC, etc. during the year (including Government-initiated programmes such as Swachh Bharat, AIDS Awareness, and Gender Sensitization and those organised in collaboration with industry, community and NGOs)

21

File Description	Documents
Reports of the events organized	<u>View File</u>
Any additional information	<u>View File</u>

# 3.6.4 - Number of students participating in extension activities listed in 3.6.3 during the year

2262

File Description	Documents
Reports of the events	<u>View File</u>
Any additional information	<u>View File</u>

### 3.7 - Collaboration

3.7.1 - Number of collaborative activities during the year for research/ faculty exchange/ student exchange/ internship/ on-the-job training/ project work

138

File Description	Documents
Copies of documents highlighting collaboration	<u>View File</u>
Any additional information	<u>View File</u>

3.7.2 - Number of functional MoUs with institutions of national and/or international importance, other universities, industries, corporate houses, etc. during the year (only functional MoUs with ongoing activities to be considered)

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13

File Description	Documents
e-copies of the MoUs with institution/ industry/ corporate house	<u>View File</u>
Details of functional MoUs with institutions of national, international importance, other institutions etc. during the year	<u>View File</u>
Any additional information	<u>View File</u>

### INFRASTRUCTURE AND LEARNING RESOURCES

### 4.1 - Physical Facilities

4.1.1 - The Institution has adequate infrastructure and physical facilities for teaching-learning, viz., classrooms, laboratories, computing equipments, etc.

Enhancement of infrastructure goes hand in hand with the changing needs of the institution. Our institution has well established physical facilities like class rooms, laboratories, seminar halls, staff rooms, R & D centres, rest rooms, etc. All constructions have been taken up as per NBC rules and whenever new programs approved; suitable infrastructural expansion is in position. The classroom's interior furnished with a double-seat desk arrangement, a presentation platform, and a newspaper desk. In addition to this, every classroom contains an overhead LCD projector, display screen, desktop, speakers, LAN and Wi-Fi connectivity that largely help to convert traditional classes into ICT digital classrooms. The classes are scheduled in a way that Design Thinking curriculum is followed and implemented in both theory and Practical classes.

Our institution has well-established laboratories with modern and updated equipment's demanded by our curriculum. The institution holds a number of laboratories apart from the curriculum requirements known for their advanced technical assistance. The laboratories such as BOT lab, E-yatra lab, Texas Instruments' advanced embedded lab, electronic bank for mini projects, piston factory for designing and fabricating automobiles, product design and development centre that enables the design of innovative 3D models of mechanical components.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://snsce.ac.in/courses_cse_facilitie

4.1.2 - The institution has adequate facilities for cultural activities, yoga, sports and games (indoor and outdoor) including gymnasium, yoga centre, auditorium etc.)

Our institution provides an apt environment for holistic development of students, physical, mental, cultural and academics headed by Principal, entire faculty, physical director and his team.

Exquisite Indoor sports, games and activity centre - SPINE. It is a four-story, enormous structure with elevators that serves as a comprehensive indoor activity centre with indoor swimming pool, indoor cricket pitch with automatic bowling facility, state of art modernised gymnasium with cardio and fitness equipment's. Gaming facility with Billiards, Air hockey, Foosball & Hand soccer apart from Chess and Carrom, sophisticated mini theatre, Music and recording studio, Dance Studio and for yogic exercises, Creative art room, A relaxing and networking hall.

Our outdoor sports facility comprises of Basket-Ball, Volley ball, Ball badminton, Kho-kho, Cricket, Hand ball, Kabadi, Shuttle courts apart from a Football ground and Table Tennis Hall and a grand auditorium.

Annual Cultural Summit enables students everywhere to showcase their talents in dancing, singing etc., Conduct of festivals like, Pongal, Holi, Onam and Christmas provide a ground for allstudent inclusive celebrations culture, religion and states.

Various clubs such as - Youth Parliament, MUN, Coding and Web Designing, Foodies, Dance and Music, Bikers, Photography and NSS etc., By enrolling, students can choose to develop their personalities and pursue their passions.

File Description	Documents
Geotagged pictures	<u>View File</u>
Upload any additional information	<u>View File</u>
Paste link for additional information	https://snsce.ac.in/sportssnsce/

### 4.1.3 - Number of classrooms and seminar halls with ICT-enabled facilities

39

File Description	Documents
Upload any additional information	<u>View File</u>
Upload Number of classrooms and seminar halls with ICT enabled facilities (Data Template)	<u>View File</u>

# 4.1.4 - Expenditure for infrastructure augmentation, excluding salary, during the year (INR in Lakhs)

### 34.62626 Lakhs

File Description	Documents
Upload audited utilization statements	<u>View File</u>
Details of Expenditure, excluding salary, during the years	<u>View File</u>
Any additional information	<u>View File</u>

### 4.2 - Library as a Learning Resource

### 4.2.1 - Library is automated using Integrated Library Management System (ILMS)

SNS College of Engineering has enabled the library with Lips i Net (LMS) in 2003 with a perceptual license. Lips i Net is state-of-the-art integrated library management software designed and developed by the Dolphin Software Solutions, Coimbatore. The library has its own sub-LAN consisting of 7 terminals, one server to support library software, OPAC services, and other in-house computerization activities done within the library. It is user-friendly software developed to

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work ina client-server environment. The software is suitable for international standards for bibliographic formats, networking, and circulation protocols.

The basic features of Automation in circulation systems are charging, overdue controls, discharging, reserves, etc. This system should be capable to perform different jobs such as registration of library members, issuance of borrower cards, charging and discharging of documents, reminders of over dues, updating to record files, identification of items on lone, identification of items and due date slips and generating the orders for stolen books automatically, in an online computer-based circulation system, can retrieve up-to-date information immediately through the terminal. Circulation activities were computerized providing statistics on the issue and return of books. The introduction of barcode technology helped to achieve maximum efficiency in providing accuracy, speed, and reliability in issue and return procedures.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://snsce.ac.in/central_library/

# 4.2.2 - Institution has access to the following: e-journals e-ShodhSindhu Shodhganga Membership e-books Databases Remote access to e-resources

A. Any 4 or more of the above

File Description	Documents
Details of subscriptions like e- journals, e-books, e- ShodhSindhu, Shodhganga membership	<u>View File</u>
Upload any additional information	<u>View File</u>

# 4.2.3 - Expenditure on purchase of books/ e-books and subscription to journals/e-journals during the year (INR in lakhs)

### 14.65 Lakhs

File Description	Documents
Audited statements of accounts	<u>View File</u>
Any additional information	<u>View File</u>
Details of annual expenditure for purchase of books/e-books and journals/e- journals during the year (Data Template)	<u>View File</u>

# 4.2.4 - Usage of library by teachers and students (footfalls and login data for online access)

### 4.2.4.1 - Number of teachers and students using the library per day during the year

### 427

File Description	Documents
Upload details of library usage by teachers and students	<u>View File</u>
Any additional information	<u>View File</u>

### 4.3 - IT Infrastructure

# 4.3.1 - Institution has an IT policy covering Wi-Fi, cyber security, etc. and has allocated budget for updating its IT facilities

Our institution is equipped with a variety of IT facilities that are updated on a regular basis because it recognises the importance of technology in knowledge acquisition and skill development. Video conferencing, web conferencing, and elearning are made available in smart classrooms, seminar halls, conference rooms, and ICT centres to support training programmes.

The installation of 65 Wi-Fi devices allowed for full Wi-Fi coverage throughout the entire institution. To keep an eye on things, 218 CCTV security cameras and 17 CCTV DVR were installed. To provide firewall security across the entire campus, 10 Wi-Fi access points were built. Additionally, the Sonic firewall software offers user registration, IP assignment, login, and management of time limits and bandwidth restrictions. For efficient handling of student and staff information, a centralised ERP system was installed. This makes it possible for teachers, parents, and staff to access a student's academic records, including attendance, grade, and other information

The hardware, network, intranet-related services, and Wi-Fi on campus are all monitored and maintained by a technical team. The first line of defence against threats to Internet security and for regulating data transmission to the Internet is a Sonic firewall.

For use in the online lectures and practical's, the institute has licenced versions of Microsoft Office Suite (Microsoft Teams). An ID is provided for each faculty member and students.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://drive.google.com/file/d/1fP0T7oKt 5uNp4UBCkFjfz6LJ3E FREMk/view

### 4.3.2 - Student - Computer ratio

Number of Students	Number of Computers
1558	988

File Description	Documents
Upload any additional information	<u>View File</u>

# 4.3.3 - Bandwidth of internet connection in the Institution and the number of students on campus

### A. ?50 Mbps

File Description	Documents
Details of bandwidth available in the Institution	<u>View File</u>
Upload any additional information	<u>View File</u>

# 4.3.4 - Institution has facilities for e-content development: Facilities available for e-content development Media Centre Audio-Visual Centre Lecture Capturing System (LCS) Mixing equipments and software for editing

### A. All four of the above

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://www.youtube.com/watch?v=UblXciJCk ZQ
List of facilities for e-content development (Data Template)	<u>View File</u>

### 4.4 - Maintenance of Campus Infrastructure

# 4.4.1 - Expenditure incurred on maintenance of physical and academic support facilities, excluding salary component, during the year (INR in lakhs)

### 361.47532

File Description	Documents
Audited statements of accounts	<u>View File</u>
Upload any additional information	<u>View File</u>

4.4.2 - There are established systems and procedures for maintaining and utilizing physical, academic and support facilities – classrooms, laboratory, library, sports complex, computers, etc.

For the maintenance of its physical, academic, and support facilities, the college has established a defined method and approach. A technical staff member and the faculty in charge keep an eye on the equipment's regular and periodic maintenance and operation in laboratories. The management suggests and approves depreciations and improvement needs.

The resources in the central library are routinely renewed and updated by the library administration, and an annual audit is conducted to assure their relevance and usefulness. The updating of the department library is carried out by the respective department through their annual budget. The institute offers distinctive and unique sporting facilities run by a physical director. The director of physical education frequently ensures upkeep and updating of the same through the principal.

Every classroom is enabled with ICT facilities via computers with smartboard/LCD Projectors and specially assigned technical

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staff supports the maintenance. The systems are updated and kept current to meet all the needs of latest technological advancement. The cleanliness of all laboratories, sports fields, classrooms and departments are organized and routinely ensured by the maintenance department under the management of the principal through engineers and supervisors to ensure all electrical, mechanical and common infrastructure related problems are addressed immediately and maintained diligently

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://snsce.ac.in/studentslife/

### STUDENT SUPPORT AND PROGRESSION

### **5.1 - Student Support**

### 5.1.1 - Number of students benefitted by scholarships and freeships provided by the Government during the year

1035

File Description	Documents
Upload self-attested letters with the list of students receiving scholarships	<u>View File</u>
Upload any additional information	<u>View File</u>

### 5.1.2 - Number of students benefitted by scholarships and freeships provided by the institution and non-government agencies during the year

254

File Description	Documents
Upload any additional information	<u>View File</u>
Institutional data in prescribed format	<u>View File</u>

### 5.1.3 - The following Capacity Development | A. All of the above and Skill Enhancement activities are organised for improving students'

capabilities Soft Skills Language and Communication Skills Life Skills (Yoga, Physical fitness, Health and Hygiene) Awareness of Trends in Technology

File Description	Documents
Link to Institutional website	https://snsce.ac.in/5pillars/
	iiceps://siisce.ac.iii/Jpiiiais/
Details of capability development and schemes	<u>View File</u>
Any additional information	<u>View File</u>

# 5.1.4 - Number of students benefitted from guidance/coaching for competitive examinations and career counselling offered by the institution during the year

### 1438

File Description	Documents
Any additional information	<u>View File</u>
Number of students benefited by guidance for competitive examinations and career counseling during the year (Data Template)	<u>View File</u>

# 5.1.5 - The institution adopts the following mechanism for redressal of students' grievances, including sexual harassment and ragging: Implementation of guidelines of statutory/regulatory bodies Creating awareness and implementation of policies with zero tolerance Mechanism for submission of online/offline students' grievances Timely redressal of grievances through appropriate committees

### A. All of the above

File Description	Documents
Minutes of the meetings of students' grievance redressal committee, prevention of sexual harassment committee and Anti-ragging committee	<u>View File</u>
Details of student grievances including sexual harassment and ragging cases	<u>View File</u>
Upload any additional information	<u>View File</u>

### **5.2 - Student Progression**

### 5.2.1 - Number of outgoing students who got placement during the year

208

File Description	Documents
Self-attested list of students placed	<u>View File</u>
Upload any additional information	<u>View File</u>

### 5.2.2 - Number of outgoing students progressing to higher education

12

File Description	Documents
Upload supporting data for students/alumni	<u>View File</u>
Details of students who went for higher education	<u>View File</u>
Any additional information	<u>View File</u>

# 5.2.3 - Number of students qualifying in state/ national/ international level examinations during the year

# 5.2.3.1 - Number of students who qualified in state/ national/ international examinations (e.g.: IIT-JAM/NET/SET/JRF/ GATE /GMAT /CAT/ GRE/ TOEFL/Civil Services/State government examinations) during the year

0

File Description	Documents
Upload supporting data for students/alumni	<u>View File</u>
Any additional information	<u>View File</u>

### 5.3 - Student Participation and Activities

# 5.3.1 - Number of awards/medals for outstanding performance in sports and/or cultural activities at inter-university / state /national / international events (award for a team event should be counted as one) during the year

16

File Description	Documents
e-copies of award letters and certificates	<u>View File</u>
Any additional information	<u>View File</u>

## 5.3.2 - Presence of an active Student Council and representation of students in academic and administrative bodies/committees of the institution

SNSCE is basically headed by the Chairman, Correspondent and Technical Director, were the Principal steers the Institution forward with an extended team of HoD, CEO, Administrative officer, Librarian and Physical Director.

The governing body is headed by the Chairman Dr. S.N.Subramanian and members of UGC, AICTE and Government of Tamilnadu and few more. Others statutory bodies of the institution are planning and monitoring committees, anti ragging committee, ICC isimplemented.

Among the major forums the Student counsel includes student's representatives and two senior faculties under the supervision of the Principal, which occurs twice a semester. On the other hand, Board of studies (BOS) has nominees from Anna university and from industry to review the autonomous curriculum/syllabus, twice a year.

Apart from these the institution has various Associations including ISTE, SAE, ACM, IE, IET and CSI. Major clubs within the institution include MUN club, yoga club, fine arts and music club, SMILE English club, and many more. These clubs are headed by elected student secretaries. Social outreach strategy in SNSCE makes students to participate NSS, YRP, RRC activities

and also promote to organize community development camps at government schools and at socially backward forums. Seperate student coucil is functioning to take care of academic related activities..

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://snsce.ac.in/ylp/

### 5.3.3 - Number of sports and cultural events / competitions organised by the institution

19

File Description	Documents
Report of the event	<u>View File</u>
List of sports and cultural events / competitions organised per year	<u>View File</u>
Upload any additional information	<u>View File</u>

### 5.4 - Alumni Engagement

5.4.1 - The Alumni Association and its Chapters (registered and functional) contribute significantly to the development of the institution through financial and other support services

The SNSCE Alumni Association has 10 members as office bearers who coordinate all the events regarding alumni association. More than 3000 members are in Alumni Association. During this academic year 10 online alumni meet has been organized and discussed with various department passed out students who shared their work experience and innovative ideas. Alumni Association organized 46 online seminars for the students with various topic to enlighten the students knowledge in current trends and Technologies of various IT Industry. More than 100 members are done Internship in various companies on the reference of the Alumni Members. Alumni members are included in BOS committee for the curriculum enrichment. Alumni members gave guidelines to the Entrepreneurship cell for the upliftment of the students who wish to be an entrepreneur. Short courses on soft skills, Spoken English, Personality Development and skills to face Interview, Resume writing, Elementary Computer Courses regularly on campus not only for the students but also

for unemployed graduates.

The Alumni's willful participation and voluntary contribution (financially & non-financially) depend primarily on gratification with their learning experience in the alma mater. Their inputs also helped the institution to improve the infrastructure. A sophisticated Executive Lounge and Placement Library was setup which was partially funded by the Alumni association. Thus, the support received from Alumni benefits the students, the institution and the society. Their contributions and involvement significantly increases the reputation of the college nationally and internationally.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional Information	https://snsgroups.com/testimonials/

# **5.4.2 - Alumni's financial contribution** during the year

D. 2 Lakhs - 5 Lakhs

File Description	Documents
Upload any additional information	<u>View File</u>

#### GOVERNANCE, LEADERSHIP AND MANAGEMENT

#### 6.1 - Institutional Vision and Leadership

6.1.1 - The governance of the institution is reflective of an effective leadership in tune with the vision and mission of the Institution

Governance of the Institution

The institution is governed by the visionary leadership of Dr.S.N.Subbramanian, Chairman, Dr.S.Rajalakshmi, Correspondent and Technical Director, Dr.S.Nalin Vimal Kumar. Under their able leadership and guidance, the Principal, institution members are marching towards the attainment of the organisation's vision.

Effective leadership is reflected through fostering excellence in the institutional culture, infrastructure, value-added programmes, management processes, faculty expertise, and student skill sets that are continuously monitored and

#### improved.

The institution's perspective plans focuses on providing the world-class education to our students through the Design Thinking Curriculum, which is implemented first of its kind in India. Institution plans provide students' access to cutting-edge facilities likelaboratories, learning tools, resources, projects from Innovation hub(iHub).

Participative Management is executed in the institution through the participation of faculty to evaluate and frame prerequisites for the syllabus through Programme Advisory Committee(PAC) of the department. With the principal's approval, the committee's recommendations are forwarded to the Board of Studies(Bos), Academic Council, and Governing Council for approval and implemented.

Faculty are participative in decision-making on the new initiatives of our students' development like strengthening the teaching-learning process, introducing new value added and non-academic credit courses, designing the career tracks to enhance the students' knowledge and skills of global standards.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional Information	https://snsce.ac.in/#placement

# 6.1.2 - Effective leadership is reflected in various institutional practices such as decentralization and participative management

Decentralization and participative management are two institutional practices that demonstrate the effective leadership. The departments are decentralised and participative in its activities for the development of the students and institution.

#### **DECENTRALISATION:**

The decentralisation of departmental operations is a sign of effective leadership. The Department Heads and faculty members have the authority to create the curricula and syllabi in

consultation with stakeholders and as required by the industry trends. The Value Added Courses and Non-Academic Credit Courses are decided and implemented by the departments to improve the calibre of students' knowledge and skill sets while working toward the mission. Department are completely decentralised on the Industry-Institution Partnership programs that are required to produce the world-class technocrats.

#### PARTICIPATIVE MANAGEMENT:

Participative Management of the institution is proven through the faculty participation in the teaching learning process& implementation of the Design Thinking Framework in the institution. Ours is the first institution in India that implemented Design Thinking Curriculum. The members of the Institution have taken the Value Added Courses on design thinking on their own interest and become the Certified Trainers. This is facilitating them to strengthen the Design Thinking Concept amongst the stakeholders. Thus decentralisation and participative management practices are followed in the institution.

File Description	Documents
Upload strategic plan and deployment documents on the website	<u>View File</u>
Upload any additional information	<u>View File</u>
Paste link for additional Information	https://snsce.ac.in/dtcurriculum/#:~:text =In%20SNS%2C%20we%20strive%20to,real%20so cial%20needs%20and%20issues.

#### 6.2 - Strategy Development and Deployment

# 6.2.1 - The institutional Strategic/ Perspective plan has been clearly articulated and implemented

The perspective plan of institution is clearly defined in the areas of Curriculum design, teaching -learning process, innovation, research and development and human resource management and development (HRM & HRD) system.

To enhance the academic activities marching towards the global excellence, Design Thinking (DT) based curriculum is

implemented in SNSCE as a pioneer. The DT framework enhance the students' thirst for knowledge and innovation. The DT Based Curriculum and Framework is made up of Institutional DT-Courses, Program DT-Courses, Career DT-Courses, and Non-Academic-DT Courses.Design Thinking curriculum is based on the Five Pillars approach -Centre for Learning & Teaching(CLT), Centre for Creativity(CFC), Skill and Career Development(SCD), Industry-Institution Partnership Cell(IIPC), Social Responsibility Initiatives(SRI).

Institution also has a perspective plan through the Institution-Industry Partnership Cell with many collaborative programmes and projects that enable the studentstobe industry-ready and globally competitive. The Innovative Hub (iHub) of the institution functions are based on the 7 industry verticals and 7 innovative technologies, which provides a greater platform for the students' innovation and projects.

Institution's HRM includes an effective management system and the developmental programs. The HR of the institution are also encouraged to undergo various educational and technical courses to enhance their knowledge and skillsets.

File Description	Documents
Strategic Plan and deployment documents on the website	<u>View File</u>
Paste link for additional information	https://snsce.ac.in/dtcurriculum/
Upload any additional information	<u>View File</u>

6.2.2 - The functioning of the various institutional bodies is effective and efficient as visible from the policies, administrative set-up, appointment and service rules, procedures, etc.

#### Organogram

The Organogramof the institution clearly depicts the managerial hierarchy of the Institution.

Chairmanholds the top management position in the organogram. He guides the work force on the institutional developmental and promotional activities through Correspondentand Technical Directorwho are the guiding and motivational leaders of the

institution.

Directorand Principalare on the top hierarchy holding the responsibilities of guiding the employees on all functional and developmental activities of the institution. They also ensure the smooth running of the day-to-day activities and its quality aspects. Vice-Principalsupports the Principal through coordination between the Heads of the Departments, Principal and top management.

Internal Quality Assurance Cell (IQAC) is the apex body holds responsibility of ensuring the quality on the academic and non-academic activities of the teaching and non-teaching staff, students and the departments.

Vice-Principaland IQAChave the mechanism to monitor the implementation of the strategies/policies framed and the outcomes obtained through the Heads of Departments. The Tutor, Faculty Advisor, IQAC Coordinators, Faculty members and Lab-in-charges are reporting to the Heads of the Departments on these aspects on daily basis. Vice-Principal and IQAC also monitoring the functions of Librarian, R&D, Placement Cell, Skill &Career Development & Physical Director.

File Description	Documents
Paste link to Organogram on the institution webpage	https://drive.google.com/file/d/13200vwVD D3VfqM3xrITDAANSQxTyPEa0/view?usp=sharing
Upload any additional information	<u>View File</u>
Paste link for additional Information	<u>NA</u>

<b>6.2.3 - Implementation of e-governance in</b>
areas of operation: Administration Finance
and Accounts Student Admission and
<b>Support Examination</b>

A. All of the above

File Description	Documents
ERP (Enterprise Resource Planning) Documen	<u>View File</u>
Screen shots of user interfaces	<u>View File</u>
Details of implementation of e- governance in areas of operation	<u>View File</u>
Any additional information	<u>View File</u>

#### **6.3 - Faculty Empowerment Strategies**

6.3.1 - The institution has effective welfare measures for teaching and non-teaching staff and avenues for their career development/ progression

SNSCE has effective welfare measures for the teaching and nonteaching faculty members focusing on the following main aspects under the career development and skill building.

#### FOR TEACHING FACULTY

- 1. The teaching faculy members are encouraged to do their high studies and certificate programmes in order to enhance their career development.
- 2. Faculty members are supported with the Seed money assistance from management to undertake minor projects and enhance the research and innovation.
- 1. The college provides 50 of the registration fee in addition to On Duty for faculty who are presenting the papers in National & International Conferences.
- 2. Faculty members are supported with Rs.1500 Rs.1000 cash award for paper presented Annexure I & II, Scopus indexed journals etc.
- 3. Providing Group Medical Insurance for all the members.
- 4. Faculty members are provided with Employee Provident Fund facility.
- 5. Faculty Exchange Programme
- 6. Staff club of SNSCE plays a key role in the faculty empowerment. It extend support to the employees to balance their work-life through motivational programmes and activities.
- 7. Encouraging faculty to enhance their qualification

- (M.Phil/ Ph.D., programme).
- 8. Extending support to the children's education of the teachers in our Institution.
- 9. Group COVID Insurance Scheme.

#### FOR NON-TEACHING FACULTY

- 1. The non-teaching faculty members are encouraged to pursue advanced degrees and certificate programmes in order to advance their professional growth, and they are given permission to do so.
- 2. Medical Group Insurance
- 3. Employee Provident Fund
- 4. Staff club of SNSCE extend support to the non-teaching faculty to balance their work-life through motivational programmes and activities.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://www.snsalumni.in/collegenews/deta ils/sns-covidfamily-welfare-scheme

# 6.3.2 - Number of teachers provided with financial support to attend conferences / workshops and towards payment of membership fee of professional bodies during the year

52

File Description	Documents
Upload any additional information	<u>View File</u>
Details of teachers provided with financial support to attend conference, workshops etc during the year (Data Template)	View File

#### 6.3.3 - Number of professional development / administrative training programmes

#### organized by the Institution for its teaching and non-teaching staff during the year

130

File Description	Documents
Reports of the Human Resource Development Centres (UGC HRDC/ASC or other relevant centres)	<u>View File</u>
Upload any additional information	<u>View File</u>

# 6.3.4 - Number of teachers who have undergone online/ face-to-face Faculty Development Programmes during the year: (Professional Development Programmes, Orientation / Induction Programmes, Refresher Courses, Short-Term Course, etc.)

89

File Description	Documents
Summary of the IQAC report	<u>View File</u>
Reports of the Human Resource Development Centres (UGC ASC or other relevant centers)	<u>View File</u>
Upload any additional information	<u>View File</u>

#### 6.4 - Financial Management and Resource Mobilization

#### 6.4.1 - Institution conducts internal and external financial audits regularly

Internal Academic Audit

The Dean's/Head's and senior professors from other departments are allocated to conduct the academic audit twice in a year. The audit consists of the activities related to Academics, Teaching, IIPC, Research ,Exam, Training and Placement, Infrastructure, staff support, department activity, student's activity, media and alumni.

To ensure the quality of the Internal Assessment Examination (IAE), the two sets of question papers are framed by the concerned faculty member, verified by the teaching coordinator of each department, HoD concerned and forwarded to the examination cell for IAE conduction. The course coordinator meeting is conducted for each common course to ensure the

course's progress, assignment evaluation process, IAE, Question paper setting, implementation of various teaching pedagogies, and seminar etc.,. The senior professor will be a coordinator of a particular common course and convene the meeting. The necessary inputs are given then and there to maintain the standard of question paper CO mapping and levels of blooms used.

#### External Academic Audit

Every year after completing all academic activities external academic audit is conducted by IQAC on inviting experts from renowned Tier I institutions to audit all the academic and administrative activities of the college.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://snsce.ac.in/iqac/

# 6.4.2 - Funds / Grants received from non-government bodies, individuals, and philanthropists during the year (not covered in Criterion III and V) (INR in lakhs)

#### 30 Lakhs

File Description	Documents
Annual statements of accounts	<u>View File</u>
Details of funds / grants received from non-government bodies, individuals, philanthropists during the year	<u>View File</u>
Any additional information	<u>View File</u>

#### 6.4.3 - Institutional strategies for mobilisation of funds and the optimal utilisation of resources

The revenues at SNS College of Engineering are raised by the tuition fees paid by students, which is in accordance withgovernment regulations and used as the primary source of revenue. These funds are generally used to support the institution's development and for the salary of the employees. The institution's consulting activities are also a source of revenue.Registration/participation fees for programmes organized by the university with external members are another

source of revenue. The IQAC and the Finance department have a system in place for maintaining and auditing records at the institution.

The developmental activities of the institution include students' training programmes, value added courses, Seed Money Fund for the research work of the students and faculty. They are supported with the travelling allowance and registration fee for the participation in conference and seminars.

Cash awards for the Best Outgoing Student (BOG) award and the AllRounder Performance (ARP) Award are also given to the students. Scholarships are also available to eligible students through the institution's numerous schemes, such as the SNS Free Education Scheme (Founder's Scholarship Scheme), concession on tuition fee for the meritorious students and financially poor students. Scholarships under Sports Quota is also provided to the students.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional Information	https://snsce.ac.in/arpscholarships/

#### 6.5 - Internal Quality Assurance System

6.5.1 - Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing quality assurance strategies and processes visible in terms of incremental improvements made during the preceding year with regard to quality (in case of the First Cycle): Incremental improvements made during the preceding year with regard to quality and post-accreditation quality initiatives (Second and subsequent cycles)

The primary goal of IQAC is to create a system for taking deliberate, consistent and catalytic action to improve the institution's academic and administrative performance. The main goal is to promote measures to improve institutional performance by implementing quality assurance practices.

1. Collaborative Learning

s.

Collaborative learning by various teaching pedagogies

The college adopts more than 35 different teaching pedagogies in the categories of Experiential Learning, Participative Learning, Problem Solving Learning and ICT Based Learning. Institution with Industrial Collaborations

The institution has signed MoU with more than 230 industries to facilitate to get Internship and Internships.

Learning by Foreign University Collaborations

The college provides opportunity for faculty and students to travel internationally to have exchange program with foreign Universities. The college has signed MoU with 2 foreign universities through which 4 faculty members and 8 students have made exchange programs

2. Five pillar approach is a unique initiative by the IQAC for the continuous development of faculty and students in both academic and professional career.

Outcomes Patent published: 54 Patent Granted: 02 Paper publication: 332 ARIIA: Band Performer MHRD -IIC: 4 STAR Students Placement: 93 % Students participation in various Events: 1234 AICTE -CII Survey: Platinum band

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://snsce.ac.in/5pillars/

6.5.2 - The institution reviews its teaching-learning process, structures and methodologies of operation and learning outcomes at periodic intervals through its IQAC as per norms

Regular Review of Teaching, Learning and Evaluation Process

Using design thinking framework, faculty members develop lesson plan aligned with course outcomes, which focused towards skill development of students (cognitive, sociological, and emotional).

Syllabus completion as per lesson plan is recorded in the AAA (Attendance, Assessment and Audit) logbook with details of the lesson plans specific to the topic, methodology adopted, allocated hours to handle particular topic by course handling faculty and reviewed by the Head of the department.

Group Discussions, Role play, Demonstration, Debates, students assessment, IA Tests are conducted and recorded in AAA log book after the completion of every activity and audited by respective department Head.

Bloom's Taxonomy integrates course activities and assessments that support student attainment of these outcomes. Faculty member's plan and schedule office hours to give students an opportunity to discuss in depth questions and explore points of confusion that cannot be fully addressed in class.

Curriculum was designed and developed by a team of academic leaders considering latest need of the industry and academic integrity involving various stake holders' feedback. To prepare students for Higher Education, competitive examinations, entrepreneurship development and employment, career oriented courses are offered to the students of 2019 Regulation

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://snsce.ac.in/5pillars/

6.5.3 - Quality assurance initiatives of the institution include Regular meeting of the IQAC Feedback collected, analysed and used for improvement of the institution Collaborative quality initiatives with other institution(s) Participation in NIRF Any other quality audit recognized by state, national or international agencies (such as ISO Certification)

A. Any 4 or all of the above

File Description	Documents
Paste the web link of annual reports of the Institution	https://snsce.ac.in/agar_2021-22/
Upload e-copies of accreditations and certification	<u>View File</u>
Upload details of quality assurance initiatives of the institution	<u>View File</u>
Upload any additional information	<u>View File</u>

#### INSTITUTIONAL VALUES AND BEST PRACTICES

#### 7.1 - Institutional Values and Social Responsibilities

#### 7.1.1 - Measures initiated by the Institution for the promotion of gender equity during the year

Gender sensitivity is an inherent value in the cultural ethos of the institute and its neighbouring community, as is evident by the following facilities -

- 1. Safety and Security
- Security checkpoints at all campus entries and exits.
- Extensive surveillance network with 24x7 in all floors with monitored control rooms.
- Strict implementation of Anti-Ragging and Smoking Free Campus.
- Fire extinguisher foractive fire protectionin controlling small fires.
- Separate hostels for men and women with dedicated wardens.

#### 2. Counselling

- Faculties take the role of counsellors where 20 students are counselled by each counsellor per semester. Girls are counselled if they feeling safe, motivated and treated equally by the people concerned
- Grievance Redressal Committees for staff and students
- Others Orientation Programmes for Teachers and Students.
- Medical, Moral, Career, Village and Vocation Counselling are made through camps.

#### 3. Common Rooms

• Separate common rooms are available for men and women.

#### 4.Other relevant Information

- Indoor Shuttle Court, Gymnasium and Playground
- General store and Stationary shop providing daily needs goods and stationery required by students.
- The facilities available in the SPINE block serves as the day care centre for the children of the members of faculty and staff.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional Information	https://tinyurl.com/59whzxwa

# 7.1.2 - The Institution has facilities for alternate sources of energy and energy conservation: Solar energy Biogas plant Wheeling to the Grid Sensor-based energy conservation Use of LED bulbs/power-efficient equipment

A. Any 4 or All of the above

File Description	Documents
Geotagged Photographs	<u>View File</u>
Any other relevant information	<u>View File</u>

7.1.3 - Describe the facilities in the institution for the management of the following types of degradable and non-degradable waste (within a maximum of 200 words)

The College adopts several techniques for the management of degradable and non-degradable waste produced in the campus

Solid waste management

Liquid waste management

E-waste management

Waste recycling system

Hazardous chemicals and radioactive waste management

#### SOLID WASTE MANAGEMENT

The solid waste generated in Academic, Administrative and Hostel blocks are collected and segregated through different types of dustbins (degradable / non-degradable) kept at various places and transported to disposal sites. Wastes like used papers, used notebooks, cardboard, glass and metals are given for recycling to an external agency

LIQUID WASTE MANAGEMENT The College has channelized waste water from different blocks of the College, Hostels and Food Court to the 500 kl /day capacity Sewage Treatment Plant (STP) with an operating flow rate of 12m3 per hour in 20 hours without any stagnation. Around 175 kl/day of sewage water is treated through this STP unit.

E-WASTE MANAGEMENT Effective functioning of computer maintenance cell and Refurbishment of Computers reduce the amount of e-waste produced in the campus. The e-waste produced are disposed through a government recognized vendor M/s Green Era Recyclers, Coimbatore.

WASTE RECYCLING SYSTEM Reduce and Reuse strategies adopted in the campus. Bio-recycling system of the wastes practices are Vermicomposting and use of Biogas Plant. Waste water recycling is done through Sewage Treatment Plants.

HAZARDOUS CHEMICALS AND RADIOACTIVE WASTE MANAGEMENT No Hazardous Chemicals and Radioactive Materials are used in the campus. Acids and Bases are neutralized before disposal. Disposal of used batteries is done by buy back policy with authorized vendors.

File Description	Documents
Relevant documents like agreements/MoUs with Government and other approved agencies	<u>View File</u>
Geotagged photographs of the facilities	<u>View File</u>
Any other relevant information	<u>View File</u>

- 7.1.4 Water conservation facilities available in the Institution: Rain water harvesting Bore well /Open well recharge Construction of tanks and bunds Waste water recycling Maintenance of water bodies and distribution system in the campus
- A. Any 4 or all of the above

File Description	Documents
Geotagged photographs / videos of the facilities	<u>View File</u>
Any other relevant information	<u>View File</u>

#### 7.1.5 - Green campus initiatives include

- 7.1.5.1 The institutional initiatives for greening the campus are as follows:
  - 1. Restricted entry of automobiles
  - 2. Use of bicycles/ Battery-powered vehicles
  - 3. Pedestrian-friendly pathways
  - 4. Ban on use of plastic
  - 5. Landscaping

A. Any 4 or All of the above

File Description	Documents
Geotagged photos / videos of the facilities	<u>View File</u>
Various policy documents / decisions circulated for implementation	<u>View File</u>
Any other relevant documents	<u>View File</u>

#### 7.1.6 - Quality audits on environment and energy undertaken by the institution

- 7.1.6.1 The institution's initiatives to preserve and improve the environment and harness energy are confirmed through the following:
- A. Any 4 or all of the above

- 1. Green audit
- 2. Energy audit
- 3. Environment audit
- 4. Clean and green campus

# recognitions/awards 5. Beyond the campus environmental promotional activities

File Description	Documents
Reports on environment and energy audits submitted by the auditing agency	<u>View File</u>
Certification by the auditing agency	<u>View File</u>
Certificates of the awards received	<u>View File</u>
Any other relevant information	<u>View File</u>

7.1.7 - The Institution has a disabled-friendly and barrier-free environment:
Ramps/lifts for easy access to classrooms and centres Disabled-friendly washrooms
Signage including tactile path lights,
display boards and signposts Assistive technology and facilities for persons with disabilities: accessible website, screen-reading software, mechanized equipment, etc. Provision for enquiry and information:
Human assistance, reader, scribe, soft copies of reading materials, screen reading, etc.

A. Any 4 or all of the above

File Description	Documents
Geotagged photographs / videos of facilities	<u>View File</u>
Policy documents and brochures on the support to be provided	<u>View File</u>
Details of the software procured for providing assistance	<u>View File</u>
Any other relevant information	<u>View File</u>

7.1.8 - Describe the Institutional efforts/initiatives in providing an inclusive environment i.e. tolerance and harmony towards cultural, regional, linguistic, communal, socio-economic and other diversities (within a maximum of 200 words).

To bring the harmony towards cultural, regional, linguistic, communal, social-economic diversities, the institution is known for conducting as Pongal, Christmas, Onam and many more. Among the cultural/ religious days, Pongal is celebrated prominently by preparing a number of Pongal dishes. It is rather pursued as departmental programs whence preparing Pongal and conducting Cultural events. Various interdepartmental games and activities were also organized. The other major religious festival was Christmas, where the institution tried to promote the fundamental Christian thought of brotherhood and love through sharing gifts and presents. The institution would be decorated glamorously to welcome the day on 25 of December. Apart from this, the institution is known for gifting necessary things for the orphans and needy as to establish the idea of oneness and brotherhood.

Initiatives to Handle Socio-Economic Diversity

Economically deprived students are uplifted by providing financial support and extra-care.

Social Values are promoted through seminars/ workshops organized by clubs/committees.

Social Responsibility is built through helping during natural calamities like cyclone, Scholarship for students lost their parents due to covid.

Remedial Coaching Classes for slow learners and rural students.

Extension Activities organized to cater to the needs of the disadvantages.

Various events organised to maintain socio economic inclusivity like Public Awareness Rallies, Orphanage visits, medical camps and eye camps

File Description	Documents
Supporting documents on the information provided (as reflected in the administrative and academic activities of the Institution)	<u>View File</u>

7.1.9 - Sensitization of students and employees of the institution to constitutional obligations:

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values, rights, duties and responsibilities of citizens:

- The institution inculcates constitutional values, rights and duties of each citizen to faculty and students through various extracurricular and cocurricular activities.
- · Our curriculum consists of subjects such as Professional Ethics and Human Values, Human Rights.
- Our Institution has an active National Social Services (NSS) club for various activities.
- · Institution hoists national flag during the days of National importance and inhibits the spirit of nationalism and constitutional duties to faculty members and students.

Academic Courses and Centers Courses such as Human Rights,
Clinical Engineering, ICU and Operation Theater Equipments,
Legal Aspects of Business, Road Safety and Traffic Rules,
Indian Constitution, Professional Ethics and Human Values,
Automotive Safety and Infotronics, Internet of Things in
Automotive Safety, Human Assist Devices and Implant Technology,
Rehabilitation Engineering, Industrial Relations and Labor
Welfare, Professional Ethics and Human Values, Essence of
Indian Traditional Knowledge, Environmental Science &
Engineering are offered in curriculum.

Youth Wing Club organizes various programs like alumni talk, CEO talk and young entrepreneurs talk. Women Empowerment Club addresses gender issues, legal awareness, and health and aspire to uplift women.

Volunteering Service for Medical Camp on Blood Sugar, Blood Pressure & Dermatology Consultation through Kumaran Medical Center Hospital, Coimbatore. Free Covid Vaccination Camps conducted for students, employees and public. Covid-19 Awareness Posters / Videos / brochure through digital platforms

File Description	Documents
Details of activities that inculcate values necessary to transform students into responsible citizens	<u>View File</u>
Any other relevant information	<u>View File</u>

# 7.1.10 - The institution has a prescribed code of conduct for students, teachers, administrators and other staff and conducts periodic sensitization programmes in this regard: The Code of Conduct is displayed on the website There is a committee to monitor adherence to the Code of Conduct Institution organizes professional ethics programmes for students, teachers, administrators and other staff Annual awareness programmes on the Code of Conduct are organized

#### A. All of the above

File Description	Documents
Code of Ethics - policy document	<u>View File</u>
Details of the monitoring committee composition and minutes of the committee meeting, number of programmes organized, reports on the various programmes, etc. in support of the claims	<u>View File</u>
Any other relevant information	<u>View File</u>

### 7.1.11 - Institution celebrates / organizes national and international commemorative days, events and festivals

The institution is known for conducting and organizing various national and international day celebrations in the campus. Most prominent among them are Independence Day, Republic Day, Consumer day, yoga day and other such events.

As a means of transcending national ideologies, patriotism, nationalism the Institute efficiently undertakes the pleasure of organizing Independence Day and Republic day within the magnificent campus. On those days, as a part of celebration the institution invites various venerable personalities whose virtue and presence stimulate the nationalistic concepts upon the students. The major part of the function involves flag hoisting, dignitaries' speech, and programs for recollecting national leaders and so on.

The prominent yet notable international day celebration of the institution is Yoga day celebration. Apart from other

celebrations, this day intakes the participation of all members of the institution, the students, teaching and non- teaching staffs, management and office staffs and everyone else. The basic strategy of celebrating the yoga day with mass participation was to recreate a pleasantly and healthy physique among us that pervades a positive aura around the campus atmosphere.

Promotion towards Innovation Our institution also promotes awareness of innovation to the students by following World Science Day, World Computer Literacy Day, National Science day, National Reading Day, World Bicycle day, International Air Traffic Controllers Day, International Civil Aviation Day by creating awareness programs related to the latest technology.

File Description	Documents
Annual report of the celebrations and commemorative events for during the year	<u>View File</u>
Geotagged photographs of some of the events	<u>View File</u>
Any other relevant information	<u>View File</u>

#### 7.2 - Best Practices

7.2.1 - Provide the weblink on the Institutional website regarding the Best practices as per the prescribed format of NAAC

Best Practice - 1

Activity Based Student Centric Teaching Learning - Case Study Videos, Demonstrations and Outbound Trainings

Objectives of the Practice

The objectives of this initiative are to: Implement activity-based learning to voluntarily engross the students in learning process.

Prove students with a relevant opportunity to make theory into practice through demo models.

Enable them to have a research approach to generate in-depth, multi-faceted understanding of complex issues in its real-life

context.

Best Practice - 2

Industry Based Curriculum

Objectives of the Practice

The objectives of this initiative are: To innovate upon and refresh the curriculum to reflect the latest developments in technology and trends within industry. To integrate pure academics and pervasive industry engagement.

To enhance learning by incorporating experimental and experiential learning.

The Context The institute always aims to have a good interaction with the industry, and believes that the gap between industrial need and academia could be bridged by regular interaction with the industry. This is attained by Design of industry based curriculum, development of laboratories in collaboration with industries and also by vouching the syllabus from the industrial members Establishing industry interaction through Industry Institute Participation Cell[IIPC] Imparting in-plant training/internship/industrial training to students and faculty members at industries Inviting more people from industry to deliver Guest lectures Conduct workshops/Seminars/FDPs/STTPs in association with industry Industrial Projects and Consultancy works.

File Description	Documents
Best practices in the Institutional website	https://snsce.ac.in/agar_2021-22/
Any other relevant information	https://snsce.ac.in/igac/

#### 7.3 - Institutional Distinctiveness

7.3.1 - Highlight the performance of the institution in an area distinct to its priority and thrust (within a maximum of 200 words)

Our five pillar approach namely Centre for Learning and Teaching (CLT), Centre for Creativity (CFC), Skill and Career Development (SCD), Industry Institute Partnership Cell (IIPC) and Social Responsibility Initiative (SRI) provides a learning environment that focuses on building a culture focusing on effective teaching and learning, innovation, skill and entrepreneurship development, industry connection, and social responsibility initiatives.

The DT based curriculum focus on the latest technologies and industrial verticals which SNS College of Engineering is religiously following. The seven technologies include Robotics and Automation, AR/VR/Metaverse, Data Science / AI/ML, IoT, Communication and Growth Tech, 3D Printing, Low Code Development and the seven industry verticals include Smart City, Health Care, Agriculture and Food Technology, Automobile, Aerospace, Retail, Power and Energy.

The curriculum includes institutional DT courses, Program specific DT courses and Career based DT courses. The uniqueness in DT curriculum is evident by how the career based courses are famed. A foreign language is offered for the students to meet the global needs. To become industry ready graduates, the curriculum offers all 5 latest technology skill based tools which may be offered in curriculum or through MOOC platform.

Through DT activation hour, first 30 minutes of class time is dedicated to teach and practice by students on the ancient holy books, Meditation and Yoga on daily basis.

File Description	Documents
Appropriate link in the institutional website	https://bitrix24public.com/sns.bitrix24.c om/docs/pub/b788c2f9b918af9c6c18af74dcb18 293/default/?&
Any other relevant information	<u>View File</u>

#### 7.3.2 - Plan of action for the next academic year

Institute has been initiating and implementing various activities to assure and improve quality in the different aspects of academics, co-curricular and extracurricular activities, and faculty development. • To get Band in NIRF

• To establish a Center of Excellence in areas such as Robotics and Automation and AR/VR & IOT etc.. • To create research culture among faculty members and students and motivate them to publish their research work in Scopus/ web of science indexed Journals. • To encourage the students and faculty members to

publish more patents/copyrights for their innovations. • To enrich the Academic partnership with leading Industries like Infosys, Google and Texas Instruments etc. • To generate more revenue through consultancy to the Industry and Government Organization. • To establish a holistic learning environment with academics, co curricular activities, sports, etc. • To enhance students placement with higher package in dream corporate