

# YEARLY STATUS REPORT - 2020-2021

Part A		
Data of the Institution		
1.Name of the Institution	SHRI GURU GOBIND SINGHJI INSTITUTE OF ENGINEERING AND TECHNOLOGY, VISHNUPURI, NANDED	
• Name of the Head of the institution	Yashwant V Joshi	
Designation	Director	
• Does the institution function from its own campus?	Yes	
• Phone No. of the Principal	02462-229234	
• Alternate phone No.	8788199586	
• Mobile No. (Principal)	8788199586	
• Registered e-mail ID (Principal)	director@sggs.ac.in	
• Address	SHRI GURU GOBIND SINGHJI INSTITUTE OF ENGINEERING AND TECHNOLOGY, VISHNUPURI, NANDED-431606 (MAHARASHTRA STATE)	
City/Town	Nanded	
• State/UT	Maharashtra	
• Pin Code	431606	
2.Institutional status		
• Autonomous Status (Provide the date of conferment of Autonomy)	24/02/2005	
• Type of Institution	Co-education	

• Location	Urban
Financial Status	Grants-in aid
• Name of the IQAC Co-ordinator/Director	Dr. Manesh B Kokare
• Phone No.	02462269169
• Mobile No:	9421474393
• IQAC e-mail ID	mbkokare@sggs.ac.in
3.Website address (Web link of the AQAR (Previous Academic Year)	https://sggs.ac.in/naac-igac
4.Was the Academic Calendar prepared for that year?	Yes
• if yes, whether it is uploaded in the Institutional website Web link:	https://sggs.ac.in/academic- calendar/

# **5.**Accreditation Details

Cycle	Grade	CGPA	Year of Accreditation	Validity from	Validity to
Cycle 1	B++	2.91	2020	14/02/2020	13/02/2025

# 6.Date of Establishment of IQAC

10/08/2018

7.Provide the list of Special Status conferred by Central and/or State Government on the Institution/Department/Faculty/School (UGC/CSIR/DST/DBT/ICMR/TEQIP/World Bank/CPE of UGC, etc.)?

Institution/ Depart ment/Faculty/Sch ool	Scheme	Funding Agency	Year of Award with Duration	Amount
Center of Excellence	TEQIP-III	World Bank	02/12/2020	2000000

# 8. Provide details regarding the composition of the IQAC:

• Upload the latest notification regarding the	<u>View File</u>	
composition of the IQAC by the HEI		

9.No. of IQAC meetings held during the year	1
• Were the minutes of IQAC meeting(s) and compliance to the decisions taken uploaded on the institutional website?	Yes
<ul> <li>If No, please upload the minutes of the meeting(s) and Action Taken Report</li> </ul>	No File Uploaded
<b>10.Did IQAC receive funding from any funding agency to support its activities during the year?</b>	No
• If yes, mention the amount	

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

1) Faculty members of the institute have done an oxygen audit of all COVID hospitals in Nanded during a pandemic. 2) Institute Academic section has developed an online teaching Learning effective mechanism during pandemics. 3) Institute Examination System has developed proctored online examination System during the period of pandemics. 4) Institute continued its culture of imparting quality teaching-learning through research and development. In recognition of this on 15th September, 2020 Dr. Manesh Kokare, Professor of Electronics and Telecommunication Engineering honored with National Level "AICTE Visveswaraya Best Teacher Award" for the year 2020-21, from All India Council for Technical Education (AICTE) New Delhi in recognition with outstanding work in technical education. Award carries Certificate, Memento, and Cash prize of Rs. 25,000/-. Award was conferred by the Hon'ble Minister of Education, Shri Ramesh Pokhriyal 'Nishank', Government of India on 15th September 2020 (Engineers Day). 5) For improving the quality of students during the pandemic lockdown, students were encouraged to do an online certificate course from Coursera. More than 6000 courses have been completed by faculty and students during Lockdown period.

**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
Innovation and Awards	Mr. Prasanna Porwal and Ms. Samiksha Pachade, Research Scholars from Center of Excellence (SIP) of SGGSIE&T working under Dr. Manesh Kokare, developed a new Retinal Fundus Multi-disease image Dataset (RFMiD). This database is accepted as Standard Database in IEEE ISBI 2021, Nice, France. Online International Challenge on
Establishment of Industrial Robotics Center	Developed State-of-the-art Industrial Robotics training center with six axis Robots, 10 Kg payload through DPDC funding of Rs. 1. Crore.
MoU with Industry Association	The MoU between SGGSIE&T, Nanded and Coursera provided a FREE learning platform to all UG, PG, PhD students and Faculty. More than 6000 courses have been completed by faculty and students during Lockdown period.
Induction Program for First Year Engineering Students	Three week induction program was organized for first year Engineering students during Feb 2020. The main aim of this program was to introduce students engineering values and ethics at the beginning of their career and get accomstomed with new enviornment of Engineering education system. based on Jeevan Vidya (Universal Human Values), experts from various disciplines were invited to give orientations to the stuudents.
13.Was the AQAR placed before the statutory body?	Yes

	TECHNOLOGY, VISHNUPURI, NANDED
• Name of the statutory body	
Name of the statutory body	Date of meeting(s)
Academic Council	28/01/2022
14.Was the institutional data submitted to AISHE ?	Yes
• Year	
Year	Date of Submission
17/01/2022	17/01/2022
15.Multidisciplinary / interdisciplinary	
16.Academic bank of credits (ABC):	
17.Skill development:	
18.Appropriate integration of Indian Knowled using online course)	lge system (teaching in Indian Language, culture,
19.Focus on Outcome based education (OBE):	Focus on Outcome based education (OBE):
20.Distance education/online education:	
	ad Drafia

# **Extended Profile**

# 1.Programme

1.1

27

Number of programmes offered during the year:

File Description	Documents
Institutional Data in Prescribed Format	No File Uploaded

# 2.Student

2.1

3198

3198

406

Total number of students during the year:

File Description	Documents
Institutional data in Prescribed format	No File Uploaded
2.2	843

2.2

Number of outgoing / final year students during the year:

File Description	Documents
Institutional Data in Prescribed Format	No File Uploaded

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	No File Uploaded

# **3.Academic**

3.1

Number of courses in all programmes during the year:

File Description	Documents
Institutional Data in Prescribed Format	No File Uploaded
3.2	93

3.2

Number of full-time teachers during the year:

Extended Profile		
1.Programme		
1.1		27
Number of programmes offered during the year:		
File Description	Documents	
Institutional Data in Prescribed Format	N	lo File Uploaded
2.Student		
2.1		3198
Total number of students during the year:		
File Description	Documents	
Institutional data in Prescribed format	N	lo File Uploaded
2.2		843
Number of outgoing / final year students during t	he year:	
File Description	Documents	
Institutional Data in Prescribed Format	N	lo File Uploaded
2.3		3198
Number of students who appeared for the examinations conducted by the institution during the year:		
File Description     Documents		
Institutional Data in Prescribed Format	N	Io File Uploaded
3.Academic		
3.1		406
Number of courses in all programmes during the year:		
File Description	Documents	
Institutional Data in Prescribed Format	Ň	lo File Uploaded

3.2		93
Number of full-time teachers during the year:		
File Description	Documents	
Institutional Data in Prescribed Format	N	lo File Uploaded
3.3		139
Number of sanctioned posts for the year:		
4.Institution		
4.1		1502
Number of seats earmarked for reserved categories as per GOI/State Government during the year:		
4.2		35
Total number of Classrooms and Seminar halls		
4.3		1190
Total number of computers on campus for academic purposes		
4.4		2953.26256
Total expenditure, excluding salary, during the year (INR in Lakhs):		

# 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 of all programmes is developed in accordance with the Programme Educational Objectives (PEO) and Programme Outcomes (PO), which in turn are in tune with the mission statements of the Institute. The process of developing the curriculum and the course content takes into consideration the feedback from different stakeholders, including academic and industrial experts, and ensures that it has relevance to the local, regional, national and global developmental needs. The curricula and course content thus framed are recommended by the Board of Studies and subsequently approved by Academic Council. An overview of the contribution to the developmental needs at various levels is given below.

Local and regional developmental needs:

There are several courses in different programmes which enable students to analyze the local and regional needs and provide solutions based on their engineering knowledge acquired. This opportunity, at the same time, gives the students a real-life experience. The project component embedded in specific courses gives leverage to the students to involve in the developmental activities of the Nanded and Marathwada region, in terms of solving local technical issues. Substantial fieldwork in the surrounding villages paves way for the analysis of physical and socioeconomic factors that influence the development and future growth of the city (e.g. Course on Textile Technology, since in nearby area lot cotton crop is harvested and cotton industries are in the surrounding). In addition, the courses also assist in creating students 'awareness of helping farmers by solving their problems through technological solutions. Many extension and economic courses for the students of Agriculture involve interaction with the farmers, government agencies in and around Nanded, to uplift productivity. Students are often challenged with the problems faced by small-scale industries (e.g.Tulsi paint Nanded, and nearby sugar industries) and are enthused to provide relevant scientific solutions. The eighth semester in all courses brings in expertise from the industry by doing projects in Industry. In addition industrial visits expose the students to real-world problems.

National and Global Developmental Needs

In tune with the national and global developmental needs, the institute has introduced several new programmes in the areas of Artificial Intelligence and Machine Learning, VLSI Design, Computer Science and Network Security, Product Lifecycle Management, etc. Additionally, several courses are aimed at enhancing the technical and entrepreneurship skills of the students, that are in sync with Start-up India policy. This enhances the employability skills of students. Courses that are in tune with the national mission of 'Make-in-India' pave way for the economic growth of the nation. Aligned with the Digital India mission, courses related to latest computer languages like Python/ PERL are introduced in many programmes. Courses on renewable energy, climate change and environmental effects are also offered to sensitize the students to global health. In addition, a range of co-curricular and extra-curricular activities (mandatory as part of the curriculum) are aligned with the overall development of the student, which has an impact on the national and global developmental needs.

File Description	Documents
Upload additional information, if any	No File Uploaded
Link for additional information	https://sggs.ac.in/home/page/Curriculum- and-Syllabus

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

### 10

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	No File Uploaded

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

91

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	No File Uploaded
Any additional information	No File Uploaded

# **1.2 - Academic Flexibility**

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

## 22

File Description	Documents
Minutes of relevant Academic Council/BoS meetings	<u>View File</u>
Any additional information	No File Uploaded
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

### 10

File Description	Documents
Minutes of relevant Academic Council/BoS meetings	<u>View File</u>
Any additional information	No File Uploaded
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

The institute ensures integration of relevant cross cutting issues

in the curriculum of all the programmes offered. Some of these courses are mandatory requirement for graduation. Additionally, SGGSIE&T Nanded admits students from all regions of Maharashtra and Jammu Kashmir through special quota. The peer and group learning, extra-curricular courses act as melting pot cutting across age, gender, nationality not only to absorb but also to respect other cultures. Following are some of the specific information that relates to the above requirement.

#### Gender

As part of the Ethics and Values course, students are required to address the issues related to women empowerment, child abuse, responsible living and others. Rallies and street plays, involving students, address gender related issues. As part of curriculum Human values and Ethics, Indian Constitution courses are offered

### Environment and Sustainability

Environmental Science is a mandatory course in all the undergraduate programmes at first year level. In this course students learn 'Environment Impact Assessment', 'Environment Quality Monitoring', 'Environmental Audit' and several others address the issues related to Environment and Sustainability. Students are involved in green auditing of the campus and keep track of carbon footprint of the campus. As part of the course, events such as Water Conservation and Energy Conservation Seminars are organized every year SO as to sensitize the campus on the sustainable developmental strategies. In the annual technical event "KRISGI PRAGYYA", the organic cultivation for students of agriculture universities nearby Nanded and all over India showcase the importance of nature in Agriculture.

#### Human Values and Professional Ethics

Course on Ethics and Values is mandatory for all the undergraduate students. In this course they learn Corporate Ethics, Business ethics, Media Ethics which are incorporated in the curriculum

relevant programmes. Topics on manners of and etiquettes in courses related to soft skills. SGGSIE&T Nanded covered are encourages students participation in extra-curricular activity and organizing annual technical event "PRAGYYA" and Students gathering "UTSAV". At present 15 clubs and chapters are available for students. Students can register in any one of these clubs / chapters, depending on their interest and undertake activities related to the chosen field and in many instances the students extend their support to the social cause and create awareness related to gender and address issues related to sustainable living. Visit to orphanages and social internship, as part of their extracurricular activity, make the students to respect the human values and make them understand the moral responsibility. As part of the course, section of social students contribute to the NCC and NSS schemes. In general, participation in these extra- curricular activities promotes gender equity, facilitates team work, enhances leadership skills, builds confidence, personal social responsibility and enables the students to face the challenges in the future workplace, as these mould them to be holistic individuals.

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	No File Uploaded

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

### 14

File Description	Documents
List of value-added courses	<u>View File</u>
Brochure or any other document relating to value-added courses	No File Uploaded
Any additional information	No File Uploaded

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

# 2292

File Description	Documents
List of students enrolled	<u>View File</u>
Any additional information	No File Uploaded

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

## 288

File Description	Documents
List of programmes and number of students undertaking field projects / internships / student projects	No File Uploaded
Any additional information	No File Uploaded

## 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://drive.google.com/drive/u/0/folders /1PvIZ561rCawZgXsA00H0KRMZQjz9qdua
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	No File Uploaded

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

and action taken

File Description	Documents
Provide URL for stakeholders' feedback report	<pre>//drive.google.com/drive/u/0/folders/1PvIZ 561rCawZgXsA00H0KRMZQjz9qdua</pre>
Any additional information	No File Uploaded

## **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

### 3199

File Description	Documents
Any additional information	No File Uploaded
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)

### 2020

File Description	Documents
Any additional information	No File Uploaded
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.

Assessing learning levels of students

SGGSIE&T Nanded has a robust and dynamic mechanism for assessing the learning levels of the students. After admitting students to the institute AMCAT test is conducted for every student to know his/her proficiency. Soft Skills and English Language bridge courses are offered to students with low proficiency. After completion of these courses, the credit course on Professional Communication is offered at the first-year level. This enables the institution to address the difficulties of students who had their studies in vernacular medium. Since students with a diverse mix of courses taken in the qualifying examination are being admitted to various programmes, customized bridge courses such as Engineering Exploration, Basic Mathematics, Programming for Problem Solving are offered as applicable.

### Special initiatives for Slow Learners

Students scoring less than 40% in the first Continuous Assessment Test I (CAT-I) are classified as slow learners. A provision is available to organize special classes for slow learners, and follow-up action is also taken in the form of additional classes, tutorials, and assignments. The Summer Term system is followed in the institution, which facilitates the students to pace their learning. Slow learners can register for the minimum number of credits and complete the program at their own pace. The mentors play a crucial role in guiding the students in this regard.

### Special Programs for Advanced Learners

Opportunities exist for students to complement and enhance their learning experience by crediting additional courses in diverse areas. The institute also facilitates research at the undergraduate level. The regulation also permits students to complete their capstone project as a Semester credit transfer scheme in a reputed college like College of Engineering Pune, VJTI Mumbai, and Walchand College of Engineering Sangli. Also, students can do their final year project in Industry for one complete Semester. The vibrant set of student clubs and chapters of Professional Societies provide advanced learners to have hands-on experience in various domains of their choice.

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional information	Nil

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

Year	Number of Students	Number of Teachers
28/07/2020	3199	134
File Description	Documents	

File Description	Documents
Upload any additional information	No File Uploaded

# 2.3 - Teaching- Learning Process

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

SGGSIE&T Nanded introduced Curriculum, which emphasize student centric methods. The importance of student-centric methods and the three principal learning modes are given due weightage in planning the curriculum and this aspect is made a regular component in majority of the courses. Most of the core courses have either a regular laboratory or project-based learning as a component as part of the course.

Participatory Learning: Active Learning Methods (ALMs) like Group Discussions, Workshops, Assignments, Technical clubs, Hackathon etc. help the students whose learning style is in sync with Participatory Learning. Students are also encouraged to carry out the projects in groups. The group projects provide an opportunity for the students to learn with their peers, encourage teamwork and instil self-confidence. Every course at SGGSIE&T Nanded has been designed in such a way that students actively interact with faculty.

Experiential Learning: Most of the core courses have either a regular laboratory or project component as part of the course. The students have an opportunity to "Learn by doing" in many courses. This can be either through conventional laboratory or project-based learning. The system at SGGSIE&T Nanded utilizes various techniques like simulations, demonstrations, case studies, etc. in the implementation of Project Based Learning. Such handson experiential learning enhances the technical skills of the students at SGGSIE&T Nanded.

Problem Solving Methodologies: The teaching-learning process at SGGSIE&T, incorporates some mandatory innovative courses blended in the curriculum. Under-graduate engineering students should undergo courses like "Engineering Exploration", "Programming for problem solving" and "Minor and Major projects". The objective of

this course is to identify real life problems and use engineering principles / technologies to address the problem. The solution is expected to be in the form of fabrication / coding / modelling / product design / process design / relevant scientific methodologies. While solving the problems, students are expected to take care of technical, economic, social, environmental, political, and demographic feasibility. The student should propose a business model/plan and explore the various funding opportunities for such ventures. The student is made aware of legal, regulatory, corporate social responsibility and tax related issues. The course on "Introduction to Innovative Projects" aims to develop innovative thinking skills and helps in building confidence to handle day-to-day issues. These courses in the curriculum enhance the learning experience of the students.

File Description	Documents
Upload any additional information	No File Uploaded
Link for additional Information	Nil

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

The learning characteristics of the current generation of students are increasingly inclined towards digital, web, and mobile-based technologies. In view of recent advancements in ICT, the teachinglearning process at SGGSIE&T has been realigned and redefined, so that it facilitates the implementation of all types of educational learning theories and delivery models that support and encourage innovative teaching and learning modalities, both for theory and lab courses. SGGSIE&T Nanded has taken care of the integration of ICT in education, inter alia, does promote autonomous learning, student-centered learning, higher-order thinking, problem-solving, cooperative learning, collaborative learning, social learning, and self-paced learning, and finally, integrated learning. SGGSIE&T Nanded is using WebEx, Google Classroom, and Moodle Learning Management System (LMS). Evaluation of student performance under various parameters over an extended period in the semester is being carried out through Moodle. The LMS platform is customized with a set of features that facilitates optimization of services, such as user management, course management, online editing, data storage, and access, visual analytics, academic tracking, accountability, session participation, attendance, mark assessments, tutorials, project evaluation, collaborative study,

blogs and forums, and assessment of the performance. All classrooms are equipped with LCD, Wi-Fi, and SmartBoard. Each Department has a dedicated smart classroom with Lecture recording System. SGGSIE&T Nanded has a vast collection of online resources; faculty and students can use the digital library software called KOHA Library automation software and OPAC, as well as the Web OPAC system, which comprises full-text databases, e-journals, and ebooks like ScienceDirect, Springer, IEEE, Taylor, and Francis, etc. It also contains electronic thesis databases like ProQuest. The institute strives towards becoming the epitome of excellence in the field of online education and allied areas. To facilitate these objectives, Institute is equipped with state-of-the-art facilities.

File Description	Documents
Provide link for webpage describing ICT enabled tools including online resources for effective teaching and learning process	<u>https://sggs.ac.in/home/page/ict-</u> <u>facilities</u>
Upload any additional information	No File Uploaded

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

# **2.3.3.1 - Number of mentors**

# 66

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

### Process:

At the beginning of each academic semester, an Academic Calendar is prepared by Dean Academics. Academic Calendar covers all important dates for students such as the start of the semester, midterm examination, end term examination, holidays, result declaration date, the start of next semester, vacation, etc. The academic calendar is approved by the Director and released by the Dean of Academics.

On the basis of the Academic Calendar, timetables are prepared for each program. For full credit subjects, three to four hours per week; for half credit subjects, two hours per week, and for quarter credit subjects one hour per week are scheduled.

Respective Faculty is required to prepare and submit the teaching plan based on the course syllabus. Teaching Plans are submitted to Director through the Head of the Department and Dean Academics.

Teaching is conducted as per the teaching plan. Revisions of remedial sessions are conducted by the faculty as per the need. At the end of each semester, the respective faculty submits the Teaching Records, which records the actual sessions conducted against the plan.

### Deployment:

The process of Academic Calendar, Time Tables, Teaching plan, and Teaching record is followed for UG as well as PG programs.

### Benefits:

As the semester progresses, each faculty on regular basis updates the teaching record in the Moodle system. At the same time, a periodic review is taken by the Head of the Department, Dean Academics, and the Director. Therefore, it clearly helps the review process. This process helps in the review of faculty performance as well.

The Academic Calendar helps students get the full visibility of events that would happen during the year. The advance release of the Academic Calendar also makes sure the activities and events happen exactly as per the plan and these do not need additional communications.

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

### 66

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	No File Uploaded

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

# 46

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	No File Uploaded

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

# 1803

File Description	Documents
List of teachers including their PAN, designation, Department and details of their experience	<u>View File</u>
Any additional information	No File Uploaded

# 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

Nil

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	No File Uploaded

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

0

File Description	Documents
Upload the number of complaints and total number of students who appeared for exams during the year	No File Uploaded
Upload any additional information	No File Uploaded

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

Examination procedures and processes at SGGSIE&T Nanded: All examination-related processes and procedures are integrated into the indigenous software developed by the institute and are being continuously upgraded. All activities related to examinations including exam schedules, venue, and seating details, mark entry, grade processing, publication of results, paper seeing process, revaluation, and issue of consolidated grade sheet are carried out digitally.

Features of Examinations at SGGSIE&T Nanded: Written examinations are scheduled slot-wise as per the course registration of the students with all details on hall tickets. Both relative and absolute grading are practised based on the type and mode of the course and based on the number of students enrolled in a class.

Conduct of Examinations: Examinations are conducted in paper (normal) mode. With the faculty empowerment in action, faculty members are empowered to set their own question paper. However, there is also provision for setting common question paper for same courses offered in multiple batches. Evaluation of Answer Scripts:

End Term Manuscripts are assessed by course coordinator at centrally in Examination section. Whereas Midterm manuscripts are assessed by individual course coordinator in the respective department.

Continuous Internal Assessment System: Continuous assessments carry an overall weightage of 40%. The assessments include written tests and several other assessment options. Written tests include Computer Based Tests (CBT), Open Notebook (ONB) and Open Book (OB) type, in addition to the regular examination mode. ONB and OB examinations ensure that the students concentrate on developing their higher cognitive levels. The other assessment options include home assignments (both manual and digital), involvement in technical events, online courses, video recording, quiz, and several others. Rubrics are well-defined and communicated to the students in advance. All assessments are mapped to the appropriate course outcomes. The marks obtained in the continuous and final assessments are used to quantify the attainment of the course outcome. However, only the grades obtained by the student, in each course, are considered for calculating the programme outcome and programme specific outcome attainment.

Embedded Project Components: Courses with blend of theory, laboratory and project as applicable skills are assessed on all the three components to finalize the grades as per the ratio of their weightages.

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional Information	Nil

# 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

SGGSIE&T Nanded has been following outcome-based teaching learning process since the year 2004. Currently, all programs of the institution have the generic Program Outcomes (PO) which ensure the attainment of graduate attributes. The programs also have Program Specific Outcomes (PSO), which address the program The PSOs are formulated taking into specific requirements. consideration the expectations of respective professional bodies of the program like UGC, and AICTE. The PSOs are formulated by a team of senior faculty members of the program during the curriculum design stage itself. The PSOs are approved by the respective Board of Studies (BoS) with representation from Industries, after due deliberation. At the course level, all courses of the programme have well-defined set of course outcomes. The course outcomes are formulated during the syllabus design stage, and they address the higher order thinking capabilities. A team of faculty members handling the course formulate the COs and the same is deliberated and approved in the Board of Studies. The course outcomes are planned and designed to cover the entire syllabus and the designated competencies. The project and laboratory components of the courses also separate learning identities. A typical 3 credit course has about 6 course outcomes. Based on the specific requirements of courses the number of course outcomes vary. All the instruments used for evaluating the student performance, including assignments, quizzes, individual questions of continuous assessment tests and final assessment tests are mapped to specific Course Outcomes. This enables the precise quantitative valuation of attainment of course outcomes based on student's output. In all assessment processes, specific emphasis is given to test the attainment of higher order thinking skills.

Publicizing PO, PSO & Cos: The POs and PSOs of all programmes are published on the website of the Institution, and in the Syllabus books of programmes. POs and PSOs are displayed at the strategic locations in Schools. The POs and PSOs are made clear to all the students at the time of admission during the orientation programme. All course teachers make the course objectives, course outcomes, lesson plan schedule, detailed day-wise session plan, evaluation pattern etc, clear to the students in the very first class of the course. In the Faculty Induction Programs all faculty members are exposed to the concept of Outcome Based Teaching Learning (OBTL) Process. Refresher programs are conducted for faculty members on the OBTL Process. Thus, the institution has in place a well-defined POs & PSOs for all programs and COs for all the courses. These details are published in the institution

# website and are integrated with the teaching learning and evaluation system of the institution.

File Description	Documents
Upload COs for all courses (exemplars from the Glossary)	<u>View File</u>
Upload any additional information	No File Uploaded
Link for additional Information	https://sggs.ac.in/home/page/Curriculum- and-Syllabus

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

Implementation of OBE and assessment: Course outcome attainment is calculated from all course-related assessments. The assessment process uses both direct and indirect measures to measure the attainment of each outcome. The examples of such measures are given below:

### I. Direct attainment is calculated through

- a) Examinations
- b) Assignments and quiz

c) Projects or any other instrument used by the faculty for assessment

### II. Indirect Assessment

Course Survey is carried out for every course in each semester to get formal feedback from students for the courses offered in a semester and provide objective information to the faculty for selfappraisal, self-improvement, and development. Formal student feedback is obtained online or manually semester-by-semester mandatory course evaluation using a course survey form. The level of attainment of each Course Outcome is fixed at 60% across the Institute. The direct method (90%) is based on marks obtained in assessment and the indirect method (10%) is based on the student survey.

The level of attainment of each Course Outcome is computed using a

macro-enabled excel sheet. A detailed summary of attainment of each Course Outcome is presented to the course coordinator and Head of Department, and the reasons for non-attainment are analyzed and an action plan report is also prepared. By Undertaking Course Assessments at the end of each course and finding out the strengths and shortfalls of the learning taking place, necessary changes in Teaching-Learning Process, Course Content, etc. are proposed by the course committee. These are taken into consideration whenever this course is offered in subsequent semesters.

#### Assessment of POs and PSOs:

The Course Outcomes are mapped to appropriate Programme Outcomes and Programme Specific Outcomes through the course and program articulation matrices, in a weighted manner. Programme Core (PC) courses are being taken for calculation of PO attainment and Programme Specific courses for PSO attainment. Weighted averages are used to calculate POs and PSOs, which are obtained using the course articulation and program articulation matrices. Since the institute follows a Credit System, students from different streams and batches attend the course. Therefore, the attainment of the POs and PSOs are calculated from the grades obtained by a specific batch of students at the time of graduation. This data is analyzed and is discussed in BoS/Academic council meetings. The BoS/Academic council recommends curriculum delivery methods, improvements in COs, and improvements in the curriculum as and when required. A comparative analysis of PO attainment of successive batches of students is also carried out.

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional Information	Nil

### 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

739

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	No File Uploaded
Paste link for the annual report	Nil

# 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://sggs.ac.in/home/page/Faculty-Feedback-

# **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

SGGSIE&T Nanded accords high priority for the promotion of quality research. Accordingly, the Institution has a well-defined policy for promoting research and regularly updating the research infrastructure. The various Departments of the institution, in their annual budgets, allocate adequate resources for procuring and maintaining the state-of-the-art equipment and instruments. The institution also has centralized facilities and Center of Excellences to cater to the research needs of faculty members and students.

Some of the major research facilities augmented in the last five years are

- 1. Non-Mydriatic Retinal Camera: TOPCON TRC-NMGO
- 2. Thermal camera
- 3. Dell Precision T1700

4. High performance mobile computing Units and servers: Dell PoweredgeT40

5. GPU Server: Tyrone Camarero DS400TG-48R-2112PG

- 6. GPU Processing Server: 32GB NVDIA GPU Server
- 7. Dell OptiPlex 5080 Tower
- 8. Wireless EEG Machine: Enobio 32 Channel
- 9. Graphical Workstations 3: INVIDIA GPU
- 10. Multispectral Camera and accessories
- 11. Delta-V System RIO Hardware and Software
- 12. Coriolis Mass Flowmeter
- 13. Magnetic Flowmeter
- 14. Vortex Flowmeter
- 15. Guided Wave Level Radar
- 16. Ultrasonic Level Meter
- 17. Reciprocating Pump
- 18. Central Fabrication facility
- 19. Electric Discharge Machine (EDM),
- 20. Wire Cut Electric Discharge Machine,
- 21. Electro Chemical Machining (ECM),
- 22. Electro Chemical Discharge Machine (ECDM),
- 23. CNC Lathe, CNC Milling, Micro Electro Discharge Machine
- 24. 3D Printer
- 25. AutoCAST (Casting simulation software)

Other than the equipment and instruments, the institute subscribes to important research journals such as Elsevier, Springer, IEEE, ASME and ASCE. The institution has also subscribed to Scopus indexing database. The various research laboratories and centres established in the recent past like Center of Excellence in Signal and Image Processing, Mentor Graphics lab, Emerson. The institutional research policy is uploaded on the website (https://sggs.ac.in/home/page/PIDA). To promote quality of research and to enhance the research output, the institution has launched various research promotion schemes, which include:

• Institutional Research Scholarship Scheme (IRSS): Ph. D fellowship of Rs. Rs.25,000/- p.m. for a period of 3 years to the full time Ph. D research scholars.

• Seed money grant to young faculty members to establish their research facility in SGGSIE&T Nanded through professional and Industrial Allowance Scheme (PIDA) of the institute.

• Through PIDA Scheme a "Research Award" to faculty members, as a financial incentive for (i) Quality Publications including journal publications, books, and book chapters (ii) Patents (iii) Funded Projects and (iv) Contribution to the 'h' index of the institution

• Institution also provides full financial support for participation in national and international conferences in India and Abroad. Open access publication in high impact factor publication is also supported.

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://sggs.ac.in/home/page/Research-in- the-Institute
Any additional information	No File Uploaded

# 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)

# 23200

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	No File Uploaded

# **3.1.3** - Number of teachers who were awarded national / international fellowship(s) for advanced studies/research during the year

### 0

File Description	Documents
e-copies of the award letters of the teachers	No File Uploaded
List of teachers and details of their international fellowship(s)	<u>View File</u>
Any additional information	No File Uploaded

# **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)

### 28.54075

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	No File Uploaded

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

4

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional Information	Nil
List of research projects during the year	<u>View File</u>

# 3.2.3 - Number of teachers recognised as research guides

# 35

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

### 4

File Description	Documents
Supporting document from Funding Agencies	<u>View File</u>
Paste link to funding agencies' website	Nil
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.

```
The institution has a well-established `Technology Innovation and
Entrepreneurship Center (TIEC). TIEC - Technology Innovation and
Entrepreneurship Center is an initiative of Shri Guru Gobind
```

Singhji Institute of Technology, Nanded for identifying entrepreneurial traits in the students building their capacity for entrepreneurship, and encouraging technology start-up on the campus. TIEC administers a business incubator that provides support to Technology-based entrepreneurs. Thus, the TIEC is an extension to the research carried out on the campus, which enables its monetizing either in form of technology or technology converted into a product, which makes it relevant to Industry and societal needs. SGGS-TIEC provides access to infrastructure, prototype development, research assistance, funding, business consulting etc., in a single window mode to early-stage technology entrepreneurs. It alsomakes use of the huge research infrastructure of the institute.Towards establishing a conducive innovation ecosystem, as part of the curriculum, all students undergo various courses like Engineering Exploration, Research Methodology, Patenting, Project Based learning. These projectbased courses enable students to learn through hands on projects. All Department of the Institute periodically organise various Hackathon, Design Thinking workshops, Codeathon and PRAGYYA, KRISHI PRAGYYA (a national level technical event), R-Magadon competitions for students to enhance their design thinking capabilities.

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional information	https://onlinesggs.org/phd/Research/index. php

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

### Nil

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	No File Uploaded

# 3.4 - Research Publications and Awards

3.4.1 - The Institution ensuresA. All of the aboveimplementation of its Code of Ethics forResearch uploaded in the website through thefollowing: Research Advisory CommitteeEthics Committee Inclusion of ResearchEthics in the research methodology coursework Plagiarism check throughauthenticated 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	No File Uploaded

# **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

## 0

File Description	Documents
URL to the research page on HEI website	https://onlinesggs.org/phd/Research/
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	No File Uploaded

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

78

File Description	Documents
List of research papers by title, author, department, and year of publication	<u>View File</u>
Any additional information	No File Uploaded

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

## 21

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	Nil

# **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

# 69

File Description	Documents
Any additional information	No File Uploaded
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

# 736

File Description	Documents
Bibiliometrics of publications based on Scopus/ Web of Science - h-index of the Institution	<u>View File</u>
Any additional information	No File Uploaded

# 3.5 - Consultancy

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

# 10.18726

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	No File Uploaded
Any additional information	No File Uploaded

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

0

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	No File Uploaded
List of facilities and staff available for undertaking consultancy	No File Uploaded
Any additional information	No File Uploaded

# **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

SGGSIE&T Nanded strongly believes in the need for the holistic development of students and accordingly, the institution is putting forth consistent efforts in directing the students' energy towards addressing the real-life issues of the common man, and the society at large. In the Engineering Curriculum of SGGSIE&T Nanded, all students undergo a two-credit course on "Engineering Exploration" in which students as project teams take up a problem of the neighborhood community and come out with innovative technical solutions to these problems.

SGGSIE&T Nanded has over 17 clubs and chapters, which are active student bodies providing a platform for students to indulge in various co-curricular, extra-curricular, and outreach activities.

Following 17 clubs provide avenues, for direct interaction of the students with the society.

- 1. Bhaskarachyarya Mathematics club (for Mathematics loving students)
- 2. Team Sankalp
- 3. Team Drishti ( Institute Magazine)
- 4. VOICE Club: Small Things Make Big Difference.
- 5. PRAGGYA (National Level Technical Event Team)
- 6. UTSAV (Annual Cultural Event Team)
- 7. RNXG Club (Robotics Next Generation Club
- 8. MTrix
- 9. SAE-BAJA
- 10. Phonix
- 11. Zenith (Sports Club)
- 12. National Service Scheme (NSS) (To understand and serve the community)
- 13. Chitraksh Team-Photography Club
- 14. UPSC Chapter
- 15. FSDC-Fastal String Dance Club
- 16. Gandharv Drama Club
- 17. Avarh Music Club

The detailed account of objectives and activities of various student clubs is available on the website https://sggs.ac.in/home/page/Student-Activities

• Some of the significant outcomes of these initiatives are: The vigorous efforts of various clubs and chapters of SGGSIE&T Nanded have led to the planting of thousands of trees and improving the green cover all over campus. SGGSIE&T Nanded remains as an Institution with a large number of Blood Donations for more than 25years. Organizing National level technical event "PRAGYYAA" gives a platform to the students of all over India to showcase their technical talent. Annual State level sports event ZENITH gives a platform to all the students of the Maharashtra state to participate in sports activities.

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional information	Nil

**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

8

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	No File Uploaded

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)

0

File Description	Documents
Reports of the events organized	<u>View File</u>
Any additional information	No File Uploaded

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

0

File Description	Documents
Reports of the events	<u>View File</u>
Any additional information	No File Uploaded

# 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

70

File Description	Documents
Copies of documents highlighting collaboration	<u>View File</u>
Any additional information	No File Uploaded

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)

3

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	No File Uploaded

# 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.

Shri Guru Gobind Singhji Institute of Engineering and Technology Nanded is spread over 46 acres of land. There is a separate administrative building and 10 different Departmental buildings. Mostly all Departments have separate buildings and spaces as per AICTE requirements. The Institute has two buildings for boys' hostel to accommodate 600 students and three buildings for girls' hostel to accommodate 618 girls. In addition to this, the institute provides family accommodation to full-time Ph.D. students, guest rooms, medical attention, and hygienic food courts and mess. The Institute library has a separate two-storied block of 12400 sq. ft. surrounded by a lush green area. It has a stock of more than 56000 books and 4000 bound volumes of national and international journals. Institute currently subscribes to 72 National and 59 International journals annually. The reading room of the library is having a capacity of 250 students, where readers find a conducive environment for reading and study. Institute provides the common facilities like Auditorium, Open Air Theatre, Departmental stores, and canteens on campus. The campus is having round clock security, an uninterrupted power supply, High-Speed internet (1GBPS from NKN and 300 MBPS from Jio) with Wi-Fi connectivity throughout the campus. Institute operates a very efficient transport system with a fleet of 08 buses. On the sports front, the institute provides indoor facilities such as an airconditioned well-equipped Gymnasium, Table tennis hall. Outdoor sports spacious arena includes a volleyball court, basketball court, cricket turf wicket ground, 400 m athletic track, tennis clay court with floodlights and badminton court. At SGGSIE&T Nanded strategies are adopted for delivering the teaching-learning process, which includes interaction and direct contact between the student and teacher in classrooms, laboratories, and libraries.

The classrooms: We have 35 Classrooms, which caters the needs of UG and PG programs, including specialized interdisciplinary programs. All the classrooms have LCD facility, Wi-Fi connectivity and equipped with smart board as well as white board. This facilitates multimedia presentation and enables lecture capturing. It is well equipped with facilities of effective teaching and learning as per AICTE (for UG & PG programs)

#### Teaching & Research Laboratories:

SGGSIE&T Nanded is very well equipped with laboratory facilities for hands-on training of UG and PG students. Additionally, it has specialized laboratories that provide interdisciplinary facilities with state-of-the-art equipment for PG & Ph.D. students to carry out their research work. We have 95 teaching and research labs in various programs. There are several laboratories funded by Industry including, Mentor Graphics, Emmerson-Pass Laboratory, Endress and Hauser Laboratory, Center of Excellence in Signal, and Image Processing.

#### Computing Equipment:

Currently, computing equipment has become the backbone network of any discipline and smartphone and Wi-Fi enabled for students. With foresight, SGGSIE&T Nanded has established IT infrastructure that has been widely spread across academic buildings, laboratories and hostels using high speed robust network with access to Internet through multiple ISPs. All computers are connected to the internet over high-speed cables facilitating a 1:3 availability of computer to students. The computer laboratories cover many cutting edge research sectors, such as Networking & Pervasive, Cloud Computing & Data Analytics, Analog & Digital Circuits, Artificial Intelligence to mention only a few. SGGSIE&T Nanded provides uninterrupted access to information and network services with 1.1 Gbps of internet bandwidth and over 25 Wi-Fi access points. The security solutions from McAfee, CISCO AMP & K7 etc. are used to secure campus IT facilities.

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional information	Nil

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

At SGGSIE&T Nanded, students are groomed to have a holistic personality. To be mentally and physically fit, SGGSIE&T Nanded provides state-of-the-art facilities with magnificent, airconditioned state-of-the-art gymnasia, playgrounds, stadiums, indoor courts as well as several centers for physical education and sporting activities that help students stay as fit as a fiddle. These facilities develop a spirit of sportsmanship in students. Turf Pitched Cricket Ground, Basketball Court with Floodlights, Lawn Tennis Court with Floodlights, Volleyball Courts, Kabaddi Ground, Football Ground, Indoor Table Tennis Hall, Sports Hall for The Hostel Students Open 24/7 which Includes Table Tennis, Chess, and Carrom Boards.

#### Outdoor Sports:

1. Outdoor Stadium: The 400m track and field at ground has flood light, and Turf Pitched Cricket Ground

2. Synthetic Basketball courts: These were established with flood light to fulfil the student's needs.

3. Synthetic Tennis Courts: Tennis courts fulfil the students' needs, with flood light and

4. Volleyball Courts: Volleyball court is established to fulfil the students `needs with flood light and audience gallery arrangements

5. Badminton courts: Badminton courts (Men & Women) have been established with flood light

Indoor Sports:

- 1. State-of-the-art Air-Conditioned Gymnasium
- 2. Yoga Hall and Table Tennis Hall

These facilities also enable the institution to organise various sports competitions including ZENITH, the annual state level sports, and cultural fest.

#### Cultural Activities

At SGGSIE&T Nanded, education is confined not only to academic excellence, but also to the overall development of students. To meet this objective, SGGSIE&T conducts various events through the 17 clubs & chapters. The institution has adequate infrastructure facilities to successfully conduct all these activities through the available auditoriums, seminar halls and smart classrooms. These facilities also enable the institution to organise PRAGYYA and UTSAV, the annual national technical event and social gathering.

File Description	Documents
Geotagged pictures	<u>View File</u>
Upload any additional information	No File Uploaded
Paste link for additional information	Nil

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

#### 35

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)**

## 59.58283

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	No File Uploaded

## 4.2 - Library as a Learning Resource

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

SGGS Library is situated in a separate two-storied block of 1126.66 sq. M. surrounded by a lush green area. It began its existence in 1981. It has an ample stock of 75,513 books and 3959 bound volumes of National and International journals. It is the most lively place on the campus providing a safe, comfortable, and friendly environment that enables learning and advancement of knowledge and promotes innovation. Besides this, we have Book Bank Scheme for Scheduled Caste and Scheduled Tribe students. We also have subscriptions to multiple copies of National, regional, and local newspapers and magazines. We have an attractive Reading Room having a capacity of 250 students, where readers find a conducive environment for reading. We also provide an earn & learn facility for the students of economically weaker sections, where they can work in the library and can also earn through it. The mission of the Central Library is to facilitate the creation of new knowledge through the acquisition, organization, and dissemination of knowledge resources and providing value-added services.

#### Features:

Collection for Competitive Examinations like UPSC, MPSC, GATE, CAT, GRE, etc.

Collection of Marathi books of renowned authors

Collection of books on Sports, Yoga, etc.

Book bank scheme for SC, ST students

Reference books available in the night library

Display of Newspaper

Earn and learn facility

Information display and notification

Library Automation: KOHA Library automation software, OPAC, as well as the Web OPAC system, is made available in the Library. Web OPAC link - http://10.70.2.55, Circulation of books started using KOHA software. This has modules for book acquisition, cataloging, circulation, and serial management periodical management). Members can browse and search the library collections with extended bibliographic details using Web-OPAC (federated search) facilities. The library has adopted ICT applications and implemented technological innovations to improve user experience. Facilities such as self-check-in and check-out, along with an online renewal facility with SMS and e-mail alert provide a seamless user experience. The book circulation facility (selfissue and return) using RFID technology is offered. Library dues are collected through the online payment gateway system. RFID Technology and biometric authentication. This KOHA has a true enterprise-class ILS with comprehensive functionality, which includes modules for acquisitions, circulation, cataloging, serials management, authorities, flexible reporting, label printing, multi-format notices, offline circulation when internet access is not available.

Digitization Facility:

The Central Library is equipped with a modern, high-speed scanner and photocopy facility, which follows the copyright act.

Online Journals:

IEEE IEL Online

ASME

ASCE

Elsevier

ACM Digital Library

SpringerLink

IEEE Wiley e-books

#### Springer e-books

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional information	Nil

# 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	No File Uploaded

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

11.10766

File Description	Documents
Audited statements of accounts	No File Uploaded
Any additional information	No File Uploaded
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

2

File Description	Documents
Upload details of library usage by teachers and students	<u>View File</u>
Any additional information	No File Uploaded

## **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

Central IT Cell is established for Technical Support and maintains the policies governing the use of SGGSIE&T Nanded computing and IT communication resources. The IT Policy applies to the resources administered by the administrative departments such as libraries, Computer Laboratories, Offices of the Institution, Hostels, and Guesthouses wherever the network facility is provided by the Institution.

Further, the entire faculty, students, staff, departments, authorized visitors/visiting faculty, and others who may be granted permission to use the IT Infrastructure, must comply with the guidelines. Certain violations of IT policy laid down by SGGSIE&T by any institution member may even result in disciplinary action against the offender by institution authorities. The Acceptable use of policies are applicable to Employees, Students, Vendors & Visitors. IT Cell have framed various policies like Procurement, Installation of Hardware, Network and Software. Email account has been facilitated to employee, and students under E-mail Use policy which is reviewed and maintained whenever the modification happens. Website Hosting and Database Usage policy has its method and hierarchy which is followed systematically.

SGGSIE&T Nanded has proper budgeting process to meet the IT budget needs of every department. Requirement gathering happens at departments. Once the IT budget is finalized at the department level, the approved budget is consolidated at IT Cell and arrive the total IT Budget requirement. IT infrastructure has been widely spread across connecting all buildings with very high-speed robust network backbone. Our computer network is built on CISCO switching platform with backbone running on 11. Giga at present. 1200+ IP enabled devices are connected to this fast network. Understanding the demands of faculty and students to use digital media for their research, teaching & learning process, 1.1 Gbps of internet bandwidth is made available through two major Internet service providers. Over 25 Wi-Fi access points are positioned across the campus to facilitate internet access to our students, faculty, and guests while they are in the campus. Seamless internet access given to students through Hotspots and wellplanned Wi-Fi network at Hostel rooms. The comprehensive infrastructure includes physical servers with storage for Private Cloud implemented for the students to work with engineering software anytime, anywhere and from any device. Our campus IT facility secured by implementing the best of the security solution from Palo Alto, McAfee, CISCO. AMP and K7 which includes Next Generation firewall, Application firewall, Email Security, Advance Malware Protection, Endpoint Threat Protection, Openness etc.

IT expansion is done based on assessing the requirement and understanding the need of implementing the best of the breed technology to support the teaching and learning process. Also meticulous in the assessment of the industry requirement with respect to advancement in technology and ensure our students are aware of the technologies prevailing in the market.

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional information	Nil

## 4.3.2 - Student - Computer ratio

Number of Students	Number of Computers
3132	1190

File Description	Documents
Upload any additional information	No File Uploaded

# 4.3.3 - Bandwidth of internet connection in A. ?50 Mbps the Institution and the number of students on campus

File Description	Documents
Details of bandwidth available in the Institution	<u>View File</u>
Upload any additional information	No File Uploaded

4.3.4 - Institution has facilities for e-content C. Any two of the above development: Facilities available for e-content development Media Centre Audio-Visual Centre Lecture Capturing System (LCS) Mixing equipments and software for editing

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional information	https://www.youtube.com/channel/UC6BIQ8svD gwPlu1dCT60eqQ
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)

318.4675

File Description	Documents
Audited statements of accounts	<u>View File</u>
Upload any additional information	No File Uploaded

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.

SGGSIE&T Nanded has put in place standard procedures and practices which are aimed to provide excellent infrastructure facilities and periodic maintenance of them. The Planning and Monitoring is done by committee members comprising of Director, Dean Planning, Registrar, and Site Engineer, who periodically review the utilization and maintenance of infrastructure in the campuses.

Procedure for Maintaining and Utilizing Academic Facilities and Library:

The Site Department directly takes care of the physical infrastructure like classrooms, Faculty cabins, Admin Offices, School offices, Laboratories, Galleries, Seminar halls, Auditoria, Hostels, Gardens, and Circulation Areas, and various Sports Complex. The below-mentioned procedures are adopted for utilizing and maintaining various infrastructure facilities:

Classrooms and laboratories are allotted by Institute Timetable Incharge. Seminar halls, and auditoriums are booked and allocated using the online. Facility management team supervised by a Site Engineer takes care of maintaining the physical infrastructure facilities like classrooms, all seminar halls, gallery halls, lifts, etc. Maintenance related complaints are monitored through Call monitoring system and their reports are logged appropriately. Vehicle Incharge takes care of booking of transport facilities for taking the students on Industrial Visits, official meetings of faculty and staff. Each department has its own staff that include mechanics and technicians to maintain the lab equipment under the guidance of Lab In-charge who is a faculty member in the program. Lab equipment is maintained by the dedicated technicians in the labs on a periodic basis during summer/winter vacations. Many departments have Annual Maintenance Contracts (AMC) with suppliers and companies for the repair and maintenance of key equipment. Value added courses, Remedial learning classes, Summer and Winter semester for weak senior students, Preparation for TOFEL/GRE/GMAT/NET/GATE/UPSC etc. and other training programs Campus Placements are conducted, during week-ends for besides the regular teaching hours. Central Library is fully airconditioned and equipped with state-of-the-art of technology such as KOHA, RFID self-check-in book drop and check-out kiosk, Touch screen KIOSK for library information display, Discussions Video conferencing facility, CCTV etc. Central library rooms, works on all 365 days in a year and is well-utilized.

Procedure for Maintaining Computers and IT related equipment:

IT Cell is responsible for the upkeep and maintenance of all IT related and electronic equipment including computers and surveillance cameras. IT Cell has on its role many system administrators, technicians and instructors who are responsible for repair and maintenance of equipment and computers including network related issues and surveillance system.

Procedure for Maintaining Physical Infrastructure Facilities:

The maintenance department under Site Engineer and Electrical maintenance Incharge Professor maintains the physical infrastructure on the campus which includes both breakdown and preventive maintenance of facilities. There are several experienced Civil and Electrical Engineers and dedicated technicians to maintain the AV system in classrooms and labs whose service can be availed upon request. These staff report to the site Engineer who ensures that classrooms, laboratories and other academic areas are functional and well maintained. Scheduled and annual maintenance contract is in place for all major electrical equipment such as air conditioners and lifts. Periodical maintenance of utilities like Housekeeping, Power supply, Sewage Treatment & Reverse Osmosis plants, Water supply, Fire Hydrant systems and Public Address systems are carried out and the same is entered in the log book. There are housekeeping activities by Log sheets. Horticulture department looks after the premises for making the campus look clean and green.

Procedure for Maintaining Sports Facilities:

Sports section has full-fledged Sports Incharge, Instructors, and Grounds men who maintain and clean the sports facilities and grounds. All regular maintenance works are managed by the Physical Education Department, while all major works are addressed by the Site Department.

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional information	Nil

## 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

## 1974

File Description	Documents
Upload self-attested letters with the list of students receiving scholarships	<u>View File</u>
Upload any additional information	No File Uploaded

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

#### 0

File Description	Documents
Upload any additional information	No File Uploaded
Institutional data in prescribed format	<u>View File</u>

5.1.3 - The following Capacity Development	Α.	<b>All</b>	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://sggs.ac.in/home/page/Student- Activities
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

8

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	No File Uploaded
Details of student grievances including sexual harassment and ragging cases	No File Uploaded
Upload any additional information	No File Uploaded

# 5.2 - Student Progression

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

#### **289**

File Description	Documents
Self-attested list of students placed	<u>View File</u>
Upload any additional information	No File Uploaded

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

## 13

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	No File Uploaded

# **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

#### 20

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

# 3

File Description	Documents
e-copies of award letters and certificates	<u>View File</u>
Any additional information	No File Uploaded

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

The institute has an active Student Council with representatives from all the programmes of the institute. The Student Council is appointed every year through a rigorous selection/election process assessing students' academic performance, leadership qualities, non-scholastic participation, and co-curricular & extracurricular achievements. The Student Council has a unique structure that includes both final and pre-final year students. The final year students serve as Executive Members while junior students are the secretaries.

Student Council:

The Council oversees the activities of different student clubs and chapters. The Student Council for each academic year is inaugurated officially where the members take pledge to support the student community and act as a bridge between the students and the administration. In addition, the members of the Student Council play a pivotal role in enhancing the quality of various academic processes in the institution. They also represent the student community to hostel authorities and the canteen committee ensure good quality nutritious food is served in the to hostels. The Student Council organizes various events of national importance, universal values and many Governments of India initiatives like Swachh Bharat Mission, Unnat Bharat etc., in the institute. The Student Council also takes part in many socially relevant projects for community through various outreach events. Majority of the student council members also serve as Programme Representatives (PR). PRs are nominated for every academic programme with healthy representation from both genders. PRs take part in QC and department level PR meetings. During these meetings, PR students directly interact with the Dean and the HOD as well as Director. The following issues are generally discussed during these meetings:

• Any syllabus related difficulties.

• Request for the additional support for improving students' performance.

• Any issues pertaining to classroom teaching.

• Steps taken by the department to address issues that had risen out of previous QC and PR meetings.

• Special request for field projects, internships, placement, and training.

• Analysis of the class performance in the continuous assessment examination and any issues raised by the class students to the PR. Student conveners are selected to plan and participate in annual technical festival-PRGYYA and cultural festival-UTSAV. These events are self-governed by students with various committees such as registration, publicity, finance, events, and documentation etc. The entire process is digitized and paper free. The student teams work meticulously to maintain safety and security during these events.

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional information	Nil

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

3

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	No File Uploaded

## 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

SGGSIE&T Nanded has one of the largest alumni networks. The following are the salient features of the SGGSIE&T Nanded alumni network:

There are several Alumni chapters across the country and outside the country including the USA, UK, Germany, Singapore, and UAE. The SGGSIE&T Nanded Alumni Association, a registered body in India, has been functioning from the institute campus. The main aim of the association is to maintain the link between the institution and the alumni and share information on mutual growth, achievement, and advancement in various fields. Besides, SGGSIE&T Nanded Alumni Association conducts various social activities such as blood donation and health check-up camps, tree planting events, etc. for the benefit of society. It also conducts various competitions for school kids to identify, promote and nurture the

talents among the school students. The alumni employed in reputed organizations in India and abroad help the final year students in their project work and inform them about the employment opportunities in their respective organizations. They also help in getting internships and placements for present students and organize Industrial visits. The Institute, in turn, provides free access to the library and assists budding alumni entrepreneurs to incubate technology ventures. Our alumni are invited to deliver lectures to the students about the current scenario and the recent developments in industries. SGGSIE&T Alumni members provide Sadbhavana scholarships to needy students every year. The Sadbhavana Scholarship Awards are presented to meritorious students from economically poor backgrounds at the Alumni Alumni who have made prominent contributions to the meet. field of Academics & Research, Corporate Career, Entrepreneurship and Social Development are honoured with the 'SGGS ICons, and their success stories are written in the form of books.

Main highlights of the SGGSIE&T Nanded Alumni Association website (https://www.sggsalumni.org/#):

- Maintains up-to-date information about alumni and their activities
- Acts as a professional and personal information sharing platform
- Increases the leverage of the alumni network for the benefit of the alumni
- Improves the modes of Alumni-Alumni and SGGS-Alumni communications

• Alumni can submit their accomplishments in the 'Alumni Achievements' section

• Alumni members can view jobs posted by other alumni and can also post jobs for fellow alumni

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional Information	Nil

# 5.4.2 - Alumni's financial contribution during the year

A. ? 15 Lakhs

File Description	Documents
Upload any additional information	No File Uploaded

#### 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

Academic and Administrative Governance

SGGSIE&T Nanded is an autonomous institute established by Government of Maharashtra and governed by AICTE and UGC regulations. The statutory bodies of the institute are Board of Management (BoM), Planning Committee, Finance Committee, Academic Council, and Board of Studies, constituted as per the UGC norms. The deployment of world class education starts with curriculum framing at department level committee which benchmarks the programme against renowned institutes. The proposed content and pedagogy is recommended by the Board of Studies to Academic Council for approval. The approved programmes are explored for implementation by the Academic Dean and IQAC Cell and further taken up with BoM for final approval. Once approved, the programme is further refined based on the feedback by students, teachers and industry experts. The teachers are empowered to adopt or change the content based on advancements in the field and student's feedback. The IQAC recommends innovative practices and ensures effective implementation.

Research and Consultancy Governance

To become world class, an institute should be innovative and research oriented. To facilitate research ambience and innovative culture, separate offices of Research and Development and Industrial Consultancy is created. This office is headed by Dean Research and Development who formulate policies and procedures on all matters related to Research and Consultancy for approval by Director and BoM. Another office, Patent Cell facilitates patenting for faculty and students. In addition, specialized research centers for trans and inter-disciplinary areas have also been created. A unique Innovation Lab functions to promote interdisciplinary projects. Each course has a separate module to address the current development connected to the field wherein the participation of industry experts brings out the latest developments. The Department and Research Centres conduct conference/ symposia/ hackathons for promoting research and innovation.

#### Faculty and Students Governance

Happy people are the most productive. The establishment office explores and recommends welfare schemes as per Government of Maharashtra norms like medical benefits, study leave, sabbatical leave, on-campus accommodation etc., for faculty and staff. The Academic Staff College organizes relevant training programmes for the professional development of faculty. The Students Interface Committee (SIC) that operates under Dean students Affair helps the students to resolve academic and personal problems. Collaborative Research is essential for visibility and funding. SGGSIE&T Nanded has established culture of collaboration in Academics and Research with premier institutes in India and abroad for faculty and student exchange. The office of Placement bring in industry collaboration in terms of consultancy, internships and placements. In addition, Office of Accreditation helps to enhance national and international visibility. Without serving the society, no research is complete. SGGSIE&T Nanded participates in various social welfare schemes targeted towards the community through Unnat Bharat scheme for Sustainable Rural Development and Research Studies, Higher Education Club, NSS, and various clubs and chapters.

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional Information	https://sggs.ac.in/home/page/Vision-and- Mission

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

SGGSIE&T Nanded has adopted decentralization, participative management and empowerment in all academic, administrative, finance, research and outreach activities. The administrative structure reflects completely decentralized system with welldefined roles and responsibilities. SGGSIE&T Nanded provides ample opportunities to its major stakeholders viz. students, faculty, staff, alumni and employers to participate in the development of the institute. The stake holders have representations in all statutory bodies and university level committees / cells.

There are 10 Departments headed by Heads of the Department, entrusted with the responsibility of maintaining high standards in academics and research. The weekly meetings organized at various levels i.e. Institution and Department ensure smooth communication among administrators, faculty, staff and students and effective implementation of the decisions. The leadership quality among students is cultivated by empowering them to organize major technocultural festivals like PRAGYAA and UTSAV.

In academics, the faculty members decide on all matters right from formulation of syllabus to question paper setting and evaluation. To improve the teaching-learning process, feedback is obtained from the students through quality circle meetings and end semester feedback.

The course content can be modified based on the inputs from the stakeholders, with the approval of the Department Head and subsequent ratification by the Board of Studies, which comprises of industry experts, external academia, and internal faculty members. Various committees at Department level involve faculty, staff, and students to independently manage the activities related to quality assurance, placement and training, alumni engagement, clubs, and chapters, conduct of conferences, seminars, workshops, guest lectures and arrangement of field visits.

In Academic research, scholars can choose their guide and research problem. The doctoral committee directs the course of research, right from prescribing course work, approving research topic, monitoring the progress and approving the submission of synopsis and thesis. Continuous

progress in academic research and funded projects is facilitated by Department Head Dean Research and Development. Financial Governance:

SGGSIE&T Nanded follows a decentralized approach in financial management. At the department level, the budgetary requirements for teaching, learning, research and outreach activities are consolidated and forwarded to the Dean Finance. A team of senior faculty members of the department analyse the requirements and prepare the budget. The Departmental level budgetary requirement is submitted to the Institute level committee. The committee finalizes the draft budget for the Department and forwards the institutional budget to the Finance Committee for approval. After approval by the Finance Committee, the approved budget is utilized through Purchase to Payment. The institute attaches high priority to outreach activities for the benefit of society. The students and faculty members take part in many socially relevant projects for community welfare through various outreach events .

File Description	Documents
Upload strategic plan and deployment documents on the website	<u>View File</u>
Upload any additional information	No File Uploaded
Paste link for additional Information	https://sggs.ac.in/home/page/Strategic- Plan

#### 6.2 - Strategy Development and Deployment

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

Strategic plan has been formulated in tune with the vision of the institute to excel in teaching, research, and innovation. In the year 2015, the plan was chalked out to make SGGSIE&T globally visible and to achieve a rank within top 100 among the national level institutes. Today, after six years of execution of the plan, the institute has been chosen as one of the Institutes of Eminence and ranked 4th in ARIA ranking at national level.

The salient features of the strategic plan are:

To offer more programmes and courses in multi- and/or transdisciplinary areas

To improve the percentage of faculty to be trained in India and abroad through collaborative research

To increase the global visibility

To increase the number of research labs including a centralized sophisticated instruments `facility to promote cutting edge

research.

To increase the number of academic activities with a strong focus on applied research with social impacts.

One of the successfully implemented activities under global visibility is to improve in the national and international rankings, which has reflected as 4th rank in ARIA 2020 national level ranking. Towards reaching this aspect of the strategic goal, the Institution had formulated the following set of action plan.

• Focus on Interdisciplinary research areas and establishing research infrastructure including (i) Center of Excellence in Signal and Image Processing (ii) Industrial Robotics Center (iii) Mentor Graphics Lab (iv) Endress and Hauser lab (v) Emerson Pass and (vi)Technology Innovation and Entrepreneurship Center (TIEC)

• Introducing interdisciplinary programmes in emerging areas like Data Science, Cyber Physical Systems, Wearable Technologies, Artificial Intelligence and Deep Learning

• Research to focus on Product Development, IP Generation and Commercialization.

• High quality talent acquisition

• To ensure high faculty retention the institution implements a set of measures and policies including implementation of 7th Pay commission pay scales, complete academic freedom, and conducive research ambience

• Emphasis on publishing in peer reviewed journals with high impact factor

• Sponsorship of publication fee for open access publishing

• Financial assistance for participation in reputed international conferences

• Special scheme for inviting Professors as Visiting / Adjunct Professor

• Establishing functional collaboration for Research / Faculty Exchange / Student Exchange with top 200 universities

• Enhancing interaction with various industries for student

internships & projects, consultancy, and industry sponsored laboratories

# • Securing international projects and strengthening international collaboration and joint research

File Description	Documents
Strategic Plan and deployment documents on the website	<u>View File</u>
Paste link for additional information	https://sggs.ac.in/home/page/Strategic- Plan
Upload any additional information	No File Uploaded

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.

#### Statutory Bodies

All the statutory bodies of the institution are constituted as per UGC and AICTE norms, and they meet periodically to formulate polices, critically review the progress made and offer suggestions for institutional development.

The Board of Management (BoM), constituted as per UGC norms, is the apex body which formulates all policies and procedures and provides academic and administrative leadership. The Planning Committee translates the strategic vision of the institution into concrete yearly plans and monitors their implementation. The Academic Council reviews the regulations, curricula and syllabi of various academic programmes offered and recommends for approval by the Board of Management. The Finance Committee approves the budget, monitors the budgeted spending and reviews the internal and external audited reports. It also monitors the resource mobilisation process and ensures allocation of resources for future needs.

#### Administrative setup of the Institute

The day-to-day functioning of the institution is taken care of by the Officers of the Institute, namely, 1) Director 2) Dean Finance and Resource Mobilization, and Quality Assurance 3) Registrar 4) Controller of Examinations 5)Account Officer 6) Dean Academics 7) Dean Research and Development 8) Dean Students Affair 9) Dean Procurement and Incubation 10) Director Industry Liaison and Incharge T&P 11) Heads of Departments 12) First Year Coordinator 13) Dean IT Services 14) TEQIP Coordinator.

Director is the Principal Executive Officer of the institution who leads all its activities and is responsible for implementation of the decisions of the statutory bodies. The Registrar is the administrative head of the institution and coordinates all administrative activities and appointments in the institute. The Registrar represents the institution in all official meetings and legal proceedings. Dean Academic assist Director for Academic activities. Dean finance assist Director in Financial management. Dean Procurement helps in procurements of the institute. Dean Industry Liaisoning helps to have collaboration with Industry and placement of students. Dean IT Services helps in creating IT infrastructure and networking. TEQIP Coordinator executes TEQIP program in the institute.

The institution has 10 Departments. Faculty members are attached to the departments, and report to department heads. Dean Research and Development is responsible for identifying cutting edge research areas and promoting research activities.

The institution has well-defined and transparent policies including service rules, recruitment procedures and promotion norms. The institution also has various grievance redressal bodies such as grievance redressal committees for students, faculty and staff members.

File Description	Documents
Paste link to Organogram on the institution webpage	https://sggs.ac.in/home/page/Administratio n-Chart
Upload any additional information	No File Uploaded
Paste link for additional Information	Nil

6.2.3 - Implementation of e-governance in areas of operation: Administration Finance and Accounts Student Admission and A. All of the above

#### Support Examination

File Description	Documents
ERP (Enterprise Resource Planning) Documen	No File Uploaded
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	No File Uploaded

#### **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

#### Performance Appraisal System

SGGSIE&T Nanded follows a comprehensive Performance Appraisal System (PAS) to assess the performance of teaching and nonteaching staff on an annual basis. In the performance appraisal for teaching staff includes teaching, research and service with appropriate weightages. For Assistant Professors, more weightage is given to teaching, whereas for Professors the emphasis is more on research. The Maharashtra Government has prepared this performance appraisal form and office of establishment section of institute circulates it to the employees through Head of the department and section heads. Teaching staff carry out the selfappraisal, which is followed by that of HoDs and Deans. Besides, students' feedback on the teaching-learning process is included as a part of the PAS. Performance appraisal of non-teaching staff is carried out based on the nature of the job they perform. There are 5 categories of non-teaching staff, namely, Section Heads and other officers/Laboratory support staff / Sr. Asst., Jr. Asst., Programmer, Data Entry Operators / Attenders /Electrical Maintenance Section, Security personnel and Drivers. A welldefined, transparent, norms-based promotion scheme is followed for teaching and non-teaching staff.

#### Welfare Measures

The institute recognises the service and dedication of the teaching and non-teaching staff members and offers them various welfare measures as per Government norms such as:

• Employment Provident Fund & Gratuity

- Pension Scheme/ Contributory provident funds
- Mediclaim Insurance / Accident Policy for Employees and Dependents
- Round the clock on-campus health centre facilities to cater to the medical requirements of employees and students
- Encashment of Earned Leave
- Women employees can avail 26 weeks of maternity leave
- Residential accommodation in campus on subsidized rent, based on availability
- Teaching staff are provided PhD allowance, sabbatical leave to pursue higher education/research, seed money for research, and financial support for attending conferences
- Teaching staff are encouraged to take up consultancy work
- Reward for publication of quality research papers / patents/ projects/ and books
- Laptops are issued to teaching staff while at service to pursue research and academic work.

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional information	Nil

**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

8

File Description	Documents
Upload any additional information	No File Uploaded
Details of teachers provided with financial support to attend conference, workshops etc during the year (Data Template)	No File Uploaded

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

4

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.)

## 94

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	No File Uploaded

## 6.4 - Financial Management and Resource Mobilization

6.4.1 - Institution conducts internal and external financial audits regularly

SGGSIE&T Nanded follows the standard system of accounting and complies with the guidelines of Government of Maharashtra. It has a well laid down internal control mechanism by internal auditors, audited independently every quarter, apart from an in depth annual statutory audit carried out by reputed external auditors. Periodical monitoring of expenditure, compared with the approved budget, is carried out.

#### Internal audit

Internal audits are conducted once in every quarter. R. Seth & Associates is involved in conducting internal audit during which vouching of bills, random checking and scrutiny of high value bills are done. The audit is generally conducted for 10 days and the report is submitted to the institute within a month. The internal audit is used to monitor the accounting process on a continuous basis. The audit objections raised during internal audit are rectified and recommendations for process improvement are implemented.

External audit

External audit is conducted every year. M/s Kabra and Maliwal , a renowned Chartered Accountants firm in Nanded conducts the audit. The audit starts (for the previous year) at the end of April and is completed in September. For the current year (for half-yearly period), the audit starts in December and ends in a month. Mechanism for settling audit objections During audit, the queries raised are addressed by the finance team and the rectification entries are made. Explanation to the queries is given within 15 days' time and the rectification entries are made within the next 10 days. Auditor reviews the audited financials, and after discussion with the Management, signs the financials before filing of returns with the income tax department. Areas of improvement are suggested by the auditor for implementation in the subsequent year. Typical suggestions that were implemented in the last five years are:

1. Bank reconciliation procedure for various e-Transfers

#### 2. TDS reconciliation with 26AS

#### 3. GST implementation on various auxiliary services

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional information	Nil

# 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)

0

File Description	Documents
Annual statements of accounts	No File Uploaded
Details of funds / grants received from non-government bodies, individuals, philanthropists during the year	<u>View File</u>
Any additional information	No File Uploaded

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

Financial planning and budgeting (operational expenses and capital investments) are an integral part of annual academic planning at the institute. The institute follows the procedure listed below to mobilize resources and utilizes the fund for its activities in a systematic manner.

- By a collection of tuition fees from students, as approved by the fee committee of the Government of Maharashtra, through account transfer or demand draft or online transfer.
- 2. By getting 12 (B) status from University Grants Commission (UGC).
- 3. By promoting consultancy services which will result in collaborations and brand building.
- 4. Encouraging faculty members to apply for funding from various Government agencies will help to improve the research output, infrastructure landscape by acquiring hitech equipment, manpower with the appropriate skill set, and overheads to the Institute.
- 5. By translating the patents and other IPR generated by the Institute into commercial products and processes.
- By facilitating incubation/start-ups with the Technology Business Incubator (TBI) to utilize the infrastructure available and expertise from the faculty.
- By offering new programs or interdisciplinary courses in emerging areas, which are in sync with the industry requirements.
- 8. By offering courses for industry personnel, working people either on part-time or weekend basis. This will help the working population without disturbing their schedule and the Industries to collaborate with SGGSIE&T Nanded.

- 9. By offering value-added courses.
- 10. By exploring the avenues available through MOU's signed with foreign universities.
- 11. By mobilizing funds through interest earned on corpus fund.
- 12. By establishing more student chapters and clubs and driving their activities through sponsorship/ enrolment etc.
- 13. By conducting Short term courses, workshops, and training programs for people from Industry, Academics, and Students to bridge the gap and knowledge transfer.
- 14. By collecting rent from shops let out, cafeteria, mess and health center, besides electricity and water charges as per consumption.
- 15. By collecting hostel rent from students.
- 16. By providing Guesthouse services to visitors on a chargeable basis.
- 17. By creating a corpus from Alumni contributions.
- 18. By exploring funding from Corporate / International Foundations/ NGO's etc.
- 19. By attracting donations to the trust corpus by leveraging the tax exemption availed under 80G of the Income-tax act.

Optimal utilization of resources

1. Continuous implementation of online systems to simplify the finance functions, thereby improving the skill set and multitasking ability of the employees.

2. Energy-saving measures through the installation of solar plants and buying energy through the power purchase agreement.

3. The process of integrating all the departments through automation systems is in progress resulting in cost-saving and leading to a paperless offices in the future.

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional Information	Nil

## 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)

#### Institutionalizing Experiential Learning

Since 2018, SGGSIE&T Nanded has been extensively following the Project Based Learning (PBL) pedagogy. In this regard we have included course on Engineering Exploration at first year level of UG program. The implementation of PBL has facilitated hands-on learning and resulted in substantially enhancing the higher order thinking skills of students. Some of the important learnings from over three years of practice of PBL are as follows:

- Provides a strong context for learning new ideas and concepts
- Enables accelerated learning and facilitates higher order thinking
- Appeals to slow learners and motivates them to perform well
- Reduces the gap between theory and practical applications

The IQAC reviewed the implementation of PBL in 2019 and decided to continue it further by proposing the idea of organising institute level Hackathons and and state level R-Magadon. As a maiden effort, 24 to 48 hour Hackathon and R-Magadon events with industry collaboration were organised, which provided great learning experience to the students. The competitive ambience of 'hackathon' events accelerated the learning pace and enabled deeper understanding of concepts and applications. It also facilitated team work and collaborative learning among students. With successful experiences these events, organising Hackathon, R-Magadon, and various competitions in PRGYYAA has evolved as a regular event. The institution allocates annual budget for organising the 'PRAGYYA' a national level technical event, to encourage activity based learning. To promote experiential learning, schemes such as Summer Research Internship Programme were floated by Center of Excellence in Signal and Image Processing in 2015, which proved to be a very successful venture. This summer research scheme was institutionalized from the AY 2015-16 onwards and the winners are honoured by the institute. In addition, UG students are encouraged totake-up projects in niche areas namely 3D printing, Wearable technology, Bio-inspired design, IoT & Cyber Physical Systems and VR & AR.

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional information	Nil

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

The IQAC institutionalized the process of reviewing the teachinglearning process through Students' end semester feedback, Outgoing students' survey and academic audit. Students' feedback is used as an important tool to close the loop for the teaching-learning process. The student feedback are collected at least twice in a semester to get the feedback on teaching- learning process from the students to take steps for mid-course corrections. The suggestions received from the students are passed on to the concerned faculty and HoDs to review and take suitable action. The students' end semester feedback on teacher, course and lab infrastructure is collected through institutional online feedback system. The outgoing students also provide valuable feedback on their overall academic experience. The feedback collected are analysed and presented in the IQAC meetings. The meetings result in making recommendations for improvement in the learning experience of students. Academic audit is regularly conducted by IQAC to review the academic process in the Department. The guidelines for audit are prepared as per NAAC/UGC quality framework and a brain storming session on the audit report is organized to review and recommend measures for quality enhancement.

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional information	Nil

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)

File Description	Documents
Paste the web link of annual reports of the Institution	Nil
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	No File Uploaded

#### 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

"Social Development" & "Respect for All" are two of the core values of SGGSIE&T Nanded. As a measure of translating these core values into concrete action plans, the institution had taken several measures on the promotion of gender equity. In all its activities, the institution ensures the participation of women. As part of the curriculum content on Gender, Culture & Technology, Ethics & Values, Right to Education - Women, Minority, Equality & Environment and Gender, Caste & Law address issues

related to gender. As part of these course, students learn the issues related to women empowerment, female feticide prevention, child abuse, responsible living and others. Some of the specific measures initiated by the institution to ensure female students participation in

all academic, co-curricular and extra-curricular activities are

• Providing for adequate and safe hostel space for female students

• Special security, during night hours, for female students to engage in various activities like studying in library, attending group activities and extracurricular & co-curricular activities.

• In night hours, women security guards to accompany female students during their transit 24x7. Availability of lady doctor in

the campus hospital

- A gynaecologist visits the campus hospital every week to cater the needs of female students and staff.
- Gender sensitization programs for all students, faculty and staff members.
- Special self-defense workshop for female students in their hostels

• Special sports promotion programs for female students - for instance SGGSIE&T Nanded has a female football and cricket teams that takes part in inter University Competitions.

- Exclusive gymnasium slots for female students
- Common room for female students in all academic Department.

• A mandatory workshop on Prevention of Sexual Harassment in workplaces was organized for all faculty members to create and maintain an environment free of sexual violence, harassment, exploitation and intimidation

• The entire campus is covered with CCTV cameras to provide a sense of security to inhabitants particularly women

• The institution employs women security guards The Institution also conducts many awareness programs for female students. Some of the programs organized include celebration of International Women's day every year. Thus, the Institution ensures to a gendersensitive ambience, gender-sensitive people and special drives for women empowerment.

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional Information	https://sggs.ac.in/home/page/Gender-Equity- Policy

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 A. Any 4 or All of the above

## energy conservation Use of LED bulbs/ power-efficient equipment

File Description	Documents
Geotagged Photographs	<u>View File</u>
Any other relevant information	No File Uploaded

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)

#### Solid waste management and waste recycling system

Organic and green waste, recyclable waste, and sanitary waste are collected in different bins. Segregated food waste, vegetable peels, and other kitchen wastes collected from the canteens and food joints on campus are composted. Similarly, garden waste and dry leaves are also composted. Recyclable wastes are collected and sold to vendors for recycling. Sanitary waste is given to a certified agency on alternate days for incineration. The institute's waste management & recycling policy supports our goal to reduce the number of wastes entering the waste stream.

#### Liquid Waste Management

The wastewater generated is treated in the sewage treatment. This is then recycled and used for flushing purposes or watering the gardens and lawns in the campus. The sludge settled in the Sewage treatment is removed frequently a month and composted. The compost is used as manure for the gardens. Thus, the entire wastewater generated in the campus is well treated and effectively used.

#### E-Waste Management

E-wastes, which are regularly collected from source points, are sent to the e-waste storage area. E-waste mainly consists of laptops, desktops, servers, projectors, biometric devices, condemned electronic equipment, printers, scanners, and cartridges. This e-waste is written off frequently and sold out to vendors.

### Hazardous chemicals and radioactive waste management

Overall, labs using chemicals and solvents follow the necessary safety precautions in the usage and disposal of hazardous chemicals. All equipment using radioactive elements for their functioning are carefully salvaged as per the instructions of the respective user manuals. The institution doesn't explicitly use radioactive materials in its research.

File Description	Documents
Relevant documents like agreements/MoUs with Government and other approved agencies	No File Uploaded
Geotagged photographs of the facilities	<u>View File</u>
Any other relevant information	No File Uploaded

7.1.4 - Water conservation facilities available A. Any 4 or all of the above 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

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	No File Uploaded
Any other relevant documents	No File Uploaded

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

7.1.6.1 - The institution's initiatives to B. Any 3 of the above preserve and improve the environment and harness energy are confirmed through the following:

- 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	No File Uploaded
Certificates of the awards received	No File Uploaded
Any other relevant information	<u>View File</u>

7.1.7 - The Institution has a disabled-friendly B. Any 3 of the above 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	No File Uploaded
Details of the software procured for providing assistance	No File Uploaded
Any other relevant information	No File Uploaded

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).

While enjoying the wide diversity of culture among its students and faculty, SGGSIE&T Nanded has been successfully maintaining harmony and peace all through these years without any single episode of campus unrest. SGGSIE&T Nanded remains committed to the culture of celebrating diversity leading to a higher-level unity. An atmosphere of a 'home away from home is vital for students and faculty, for nurturing a harmonious academic environment. Festivals are a celebration not only of our beliefs, but also of our differences. At SGGSIE&T Nanded, festivals like Ganapati, Diwali, ShivJayanti, Dandiya, Christmas, Eid, Navaratri, Durga Puja, Baisakhi, Holi and Gudipadwa are celebrated with gusto. every year organizes "UTSAV"- a showcase of SGGSIE&T Nanded cultures around the nation. This program, by students of various states, is a magnificent display of the diverse national culture. It is also a show of unity in diversity. Furthermore, cultural festivals like Garba Night (Navratri celebrations), Baisakhi celebrations, Ganesh Chaturthi, Shiv Jayanti, and Ambedkar Jayanti celebrate various aspects of our cultural heritage like dance, music, and food, all around the year. Apart from this, SGGSIE&T Nanded hosts several agricultural expos like KRISHI PRAGYYA in support of local farmers and offers its sports facilities for tournaments among local schools. True to the motto "A Place to Learn, and A Chance to Grow", SGGSIE&T Nanded focuses on growth of not only on knowledge, but also the holistic development of integrated personality of the students

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:

SGGSIE&T Nanded aspires to build the holistic development of its students and employees and accords due emphasis on inculcating Constitutional and Social responsibilities. The institution organizes various events towards this objective. A representative list of activities focused on inculcating the values and responsibilities as a responsible citizen are

- At the second-year level, every student must complete a course on the Indian Constitution. In this course, all the students get knowledge of rights and responsibilities as responsible citizens of India.
- The vibrant student clubs like the Voice Club provide a platform for students to discuss "Every vice nagging society and the human condition".
- 3. The debating club of the SGSSIE&T Nanded hones the debating skills of students.
- 4. Over and above this the Institution also initiates measures to inculcate a sense of social responsibilities among students and employees. Some of these measures are:
- 5. Social Internships to UG students.
- 6. Blood donation camps on the campus at frequent intervals in which students and faculty members actively participate.
- 7. Adaptation of villages under the Unnat Bharat Abhiyan (UBA) and working for this village through the active involvement of students
- 8. Special drives to propagate the merits of Social Entrepreneurship among students.
- 9. Awareness campaign on Environment, Climate Change, and Sustainability

B. Any 3 of the above

File Description	Documents
Details of activities that inculcate values necessary to transform students into responsible citizens	<u>View File</u>
Any other relevant information	No File Uploaded

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

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	No File Uploaded
Any other relevant information	No File Uploaded

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

SGGSIE&T Nanded organizes national and international commemorative days, festivals, and events.

#### National Festivals

- Baisakhi historical and religious festival in Sikhism and Hindus, and is usually celebrated on April 13 or 14 every year.
- 2. Gudhi Padva is a spring-time festival that marks the traditional New Year for Maharashtrians is also

celebrated in SGGSIE&T Nanded.

- 3. Navaratri, the nine-night Hindu festival, Eid, and Christmas day are being celebrated.
- 4. Ganpathi festival is celebrated for 10 days in the month of September every year.

#### International Days Celebration

International Women's Day is celebrated on March 8 every year at SGGSIE&T Nanded. Eminent women personalities are invited to address the staff and the students. International Day of Yoga is celebrated on the 21st of June every year. SGGSIE&T Nanded organizes a Yoga session on this day to promote the importance of Yoga in improving the mental and physical well-being of all the people in SGGSIE&T Nanded.

#### National Day Events

SGGSIE&T Nanded organizes Republic Day, Independence Day, Maharashtra Day, and University Foundation day celebrations where the students and the faculty participate to the full extent. Further, to sensitize the students on the freedom struggle.

#### Teachers' Day

SGGSIE&T Nanded celebrates the birth anniversary of the former President of India and a renowned teacher Dr. S. Radhakrishnan as Teachers' Day.

The institute also commemorates the following birth /death anniversaries of the prominent Indian personalities every year.

- 1. Mahatma Gandhi Jayanti
- 2. Lal Bahadur Shastri Jayanti
- 3. Jawaharlal Nehru Jayanti
- 4. Swamy Vivekananda Jayanti
- 5. Birth anniversary of APJAbdul Kalam
- 6. Ambedkar Jayanthi
- 7. Guru Nanak Jayanti

8. Boodha Poornima
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- 9. Birth anniversary of Savitribai Phule
- 10. Birth anniversary of Chatrapati Shivaji Maharj
- 11. Birth anniversary of Mahatma Jotiba Phule
- 12. Birth anniversary of yashwantrao Chavan
- 13. Birth anniversary of Mahatma Basweshwar
- 14. Birth anniversary of Ahilyadevi Holkar
- 15. Birth anniversary of Maharana Pratap
- 16. Birth anniversary of Annabhau Sathe
- 17. Birth anniversary of Vasantrao Naik
- 18. Birth anniversary of Krantiveer Nanasaheb Patil
- 19. Birth anniversary of Valla Bhai Patel
- 20. Birth anniversary of Indira Gandhi.

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	No File Uploaded

#### 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

#### Good governance practices:

1. Positions of Head and Deans are on a rotation basis.

- Weekly Meetings of Heads and Deans every Wednesday for discussion of issues and regular feedback on the conduction of classes and practicals.
- 3. Centre of Excellence in Signal and Image processing, Industry-sponsored Labs - VLSI Design and Verification, Endress Houser Process Control Lab, Emmerson Process Automation Lab, SAI Technology-Center for Development in Cybersecurity, State of art Industrial Robotics training center, etc.
- 4. Fully transparent procurement through GeM Portal: E-Tendering for all eligible types of tenders.
- 5. Diesel Gen-set 650 KVA, Solar Power and Power from State Electricity Board made available to avoid power failures during theory and practical hours.
- 6. The responsive Feedback system for human resources and students in place
- 7. Grievance mechanism in place
- 8. Cleanliness of campus Green campus Solar power 500KVA, RWH, recycling of water for gardening.
- 9. Wi-Fi Enabled Campus with Wi-Fi in Hostels as well.
- 10. Online digital library for textbooks and research journals to all students through the Knimbus app.
- 11. e-Shodhsindhu support from AICTE for Elsevier Resources.
- 12. Bio-Gas plant from Food Waste in Boys and Girls' mess.
- Grievance through the personal meeting Evening 6.00 PM to
   7.30 PM every day Director is available for attending students' grievances.
- 14. Students interface committee (SIC) Consisting of three students from each class - A topper, a middle level, and bottom level (academic). Usually, the middle level is a girl selected. A feedback mechanism - meeting once in a fortnight for knowing problems of students and corrective action (discussion in Weekly meeting of Heads and Deans).
- 15. Declaration of results within one week of last examination being successfully practiced since 2004. All Examinations as per Exam reforms policy of AICTE, During Pandemic all academic activities completed in Online mode including Virtual Labs for a few courses and Online evaluations.
- 16. Prepare and adhere to the Academic Calendar for the academic activities of the semester.
- 17. CBCS system to accommodate liberal learning courses -Courses from MOOCs platform, Credit transfer from MOOC -NPTEL-SWAYAM.
- 18. Statistical relative grading for academic performance
- 19. Project-Based Learning: Engineering Exploration
- 20. Academic Audit by experts from IIT, NIT, and Tier-1 colleges

in the state.

- 21. Credit transfer facility from NPTEL/Swayam, and other institutes like COEP, WCE, VJTI and SP COE, Mumbai
- 22. Innovation Ecosystem Through Problem/Project-based learning pedagogy
- 23. Students' participation in hackathons and other national competitions
- 24. Foreign language courses Conducted in a batch of 40 students (regularly free of charge)
- 25. 3 weeks Induction program for first-year Importance is given on Human values and professional ethics, Introduction of Engineering, Academic Rules and regulations, special motivational lectures, Lectures on mental health, Avoiding participation in Ragging menace, IT act and cyber awareness, etc.
- 26. Laboratories are managed by students and made available 24X7
- 27. Social Internships to make aware the students about societal problems, work with NGOs for getting acquainted with issues for probable solutions in higher classes
- 28. Three mandatory internships
- 29. Culture of paper, book chapters, monogram, and book writing with keen interest for getting global visibility in publishing research and collaboration.
- 30. Good national and international collaboration with academic, research organizations, and leading industries.
- 31. Laboratories and research proposals supported by industry
- 32. Consulting to infrastructure development of the region.
- 33. Culture of conduct of Short Term Courses, Conferences for improving connectivity with institutes and industry
- 34. Help state and national initiatives of social concern.
- 35. A separate web portal for Alumni Activities; Yearly Alumni Meet, Alumni Association and its chapters, Alumni Support to various academic activities like funding of projects and awards.
- 36. Regular participation in Baja competition organized by SAE India for design and development of all-terrain vehicle and are National winners once in 2020, runners up in 2019
- 37. Participation and prizes in Many sports events Inter-University, Intra University
- 38. Publication of Annual Magazine Team Drishti Won best magazine award for many yrs.
- 39. Conduct of Annual technical Event PRAGYAA from 2005, Utsav -Annual Social Gathering since inception, Zenith - State level Annual Sports event since 2012.
- 40. Good placement record Alumni Connect Publication of SGGS ICONS two books with stories of 60 successful alumni

File Description	Documents
Best practices in the Institutional website	Nil
Any other relevant information	Nil

## 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)

After becoming an autonomous institute, SGGSIE&T Nanded has been committed to research by treating it as the epicenter of growth and development in all directions. Such an approach has always been driven by the farsightedness of a robust research culture that is imperative for building an ideal society that aims at the development of the people and the country in its entirety. This would, in turn, mean that research culture is fundamental to the growth of a society, as it would groom a potential and knowledgeable population with a high sense of rationality and utmost commitment to society. However, admittedly, unlike the developed countries, a culture of research is largely missing in our institutions of higher education, which are the major centers for enriching manpower at all levels. Keeping this in view, SGGSIE&T Nanded has been making sincere attempts to inculcate research culture from undergraduate levels. Looking at this requirement, firstly, we have established a state-of-the-art Center of Excellence (CoE) in Signal and Image Processing on 3024 square feet area. This CoE research related to medical imaging and Signal Processing by using Machine Learning and Artificial Intelligence is carried out by UG, PG, and Ph.D. students. Secondly, we have established an Industrial Robotic center to develop skilled manpower in Robotics and Computer Vision. Thirdly, we have established SGGS-SAI Center for Research and Development in Cyber Security

## 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 of all programmes is developed in accordance with the Programme Educational Objectives (PEO) and which in turn are in tune with the Programme Outcomes (PO), mission statements of the Institute. The process of developing the curriculum and the course content takes into consideration the feedback from different stakeholders, including academic and industrial experts, and ensures that it has relevance to the local, regional, national and global developmental needs. The curricula and course content thus framed are recommended by the Board of Studies and subsequently approved Academic Council. An overview of the contribution to the by developmental needs at various levels is given below.

#### Local and regional developmental needs:

There are several courses in different programmes which enable students to analyze the local and regional needs and provide solutions based on their engineering knowledge acquired. This opportunity, at the same time, gives the students a real-life experience. The project component embedded in specific courses gives leverage to the students to involve in the developmental activities of the Nanded and Marathwada region, in terms of solving local technical issues. Substantial fieldwork in the surrounding villages paves way for the analysis of physical and socioeconomic factors that influence the development and future growth of the city (e.g. Course on Textile Technology, since in nearby area lot cotton crop is harvested and cotton industries are in the surrounding). In addition, the courses also assist in creating students 'awareness of helping farmers by solving their problems through technological solutions. Many extension and economic courses for the students of Agriculture involve interaction with the farmers, government agencies in and around Nanded, to uplift productivity. Students are often challenged with the problems faced by small-scale industries (e.g.Tulsi

paint Nanded, and nearby sugar industries) and are enthused to provide relevant scientific solutions. The eighth semester in all courses brings in expertise from the industry by doing projects in Industry. In addition industrial visits expose the students to real-world problems.

#### National and Global Developmental Needs

In tune with the national and global developmental needs, the institute has introduced several new programmes in the areas Artificial Intelligence and Machine Learning, VLSI of Design, Computer Science and Network Security, Product Lifecycle Management, etc. Additionally, several courses are aimed at enhancing the technical and entrepreneurship skills of the students, that are in sync with Start-up India policy. This enhances the employability skills of students. Courses that are in tune with the national mission of 'Make-in-India' pave way for the economic growth of the nation. Aligned with the Digital India mission, courses related to latest computer languages like Python/ PERL are introduced in many programmes. Courses on renewable energy, climate change and environmental effects are also offered to sensitize the students to global health. In addition, a range of co-curricular and extracurricular activities (mandatory as part of the curriculum) are aligned with the overall development of the student, which has an impact on the national and global developmental needs.

File Description	Documents
Upload additional information, if any	No File Uploaded
Link for additional information	https://sggs.ac.in/home/page/Curriculum- and-Syllabus

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

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	No File Uploaded

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

0	1
9	щ

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	No File Uploaded
Any additional information	No File Uploaded

## 1.2 - Academic Flexibility

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

22

File Description	Documents
Minutes of relevant Academic Council/BoS meetings	<u>View File</u>
Any additional information	No File Uploaded
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

File Description	Documents
Minutes of relevant Academic Council/BoS meetings	<u>View File</u>
Any additional information	No File Uploaded
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

The institute ensures integration of relevant cross cutting issues in the curriculum of all the programmes offered. Some of these courses are mandatory requirement for graduation. Additionally, SGGSIE&T Nanded admits students from all regions of Maharashtra and Jammu Kashmir through special quota. The peer and group learning, extra-curricular courses act as melting pot cutting across age, gender, nationality not only to absorb but also to respect other cultures. Following are some of the specific information that relates to the above requirement.

#### Gender

As part of the Ethics and Values course, students are required address the issues related to women empowerment, to child abuse, responsible living and others. Rallies and involving students, address gender related street plays, part of curriculum Human values and Ethics, issues. As Indian Constitution courses are offered

#### Environment and Sustainability

Environmental Science is a mandatory course in all the undergraduate programmes at first year level. In this course students learn 'Environment Impact Assessment', 'Environment Quality Monitoring', 'Environmental Audit' and several others address the issues related to Environment and Sustainability. Students are involved in green auditing of the campus and keep track of carbon footprint of

the campus. As part of the course, events such as Water Conservation and Energy Conservation Seminars are organized every year so as to sensitize the campus on the sustainable developmental strategies. In the annual technical event "KRISGI PRAGYYA", the organic cultivation for students of agriculture universities nearby Nanded and all over India showcase the importance of nature in Agriculture.

#### Human Values and Professional Ethics

Course on Ethics and Values is mandatory for all the undergraduate students. In this course they learn Corporate Ethics, Business ethics, Media Ethics which are incorporated in the curriculum of relevant programmes. Topics on manners and etiquettes are covered in courses related to soft skills. SGGSIE&T Nanded encourages students participation in extra-curricular activity and organizing annual technical event "PRAGYYA" and Students gathering "UTSAV". At present 15 clubs and chapters are available for students. Students can register in any one of these clubs / chapters, depending on their interest and undertake activities related to the chosen field and in many instances the students extend their support to the social cause and create awareness related to gender and address issues related to sustainable living. Visit to orphanages and social internship, as part of their extracurricular activity, make the students to respect the human values and make them understand the moral social responsibility. As part of the course, section students contribute to the NCC and NSS schemes. of Tn general, participation in these extra- curricular activities promotes gender equity, facilitates team work, enhances leadership skills, builds confidence, personal social responsibility and enables the students to face the challenges in the future workplace, as these mould them to be holistic individuals.

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	No File Uploaded

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

## 14

File Description	Documents
List of value-added courses	<u>View File</u>
Brochure or any other document relating to value- added courses	No File Uploaded
Any additional information	No File Uploaded

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

### 2292

File Description	Documents
List of students enrolled	<u>View File</u>
Any additional information	No File Uploaded

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

288

File Description	Documents
List of programmes and number of students undertaking field projects / internships / student projects	No File Uploaded
Any additional information	No File Uploaded

# 1.4 - Feedback System

1.4.1 - Structured feedback and review of	А.	<b>A11</b>	4	of	the	above
the 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://drive.google.com/drive/u/0/folder s/1PvIZ561rCawZgXsAO0H0KRMZQjz9qdua				
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	No File Uploaded				
1 4 2 - The feedback system of	f the B Feedback collected analysed				

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

B. Feedback collected, analysed and action taken

File Description	Documents
Provide URL for stakeholders' feedback report	//drive.google.com/drive/u/0/folders/1PvI Z561rCawZgXsAO0H0KRMZQjz9qdua
Any additional information	No File Uploaded

## **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

### 3199

File Description	Documents
Any additional information	No File Uploaded
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)

File Description	Documents
Any additional information	No File Uploaded
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.

#### Assessing learning levels of students

SGGSIE&T Nanded has a robust and dynamic mechanism for assessing the learning levels of the students. After admitting students to the institute AMCAT test is conducted for every student to know his/her proficiency. Soft Skills and English Language bridge courses are offered to students with low proficiency. After completion of these courses, the credit course on Professional Communication is offered at the firstyear level. This enables the institution to address the difficulties of students who had their studies in vernacular medium. Since students with a diverse mix of courses taken in the qualifying examination are being admitted to various programmes, customized bridge courses such as Engineering Exploration, Basic Mathematics, Programming for Problem Solving are offered as applicable.

Special initiatives for Slow Learners

Students scoring less than 40% in the first Continuous Assessment Test I (CAT-I) are classified as slow learners. A provision is available to organize special classes for slow learners, and follow-up action is also taken in the form of additional classes, tutorials, and assignments. The Summer Term system is followed in the institution, which facilitates the students to pace their learning. Slow learners can register for the minimum number of credits and complete the program at their own pace. The mentors play a crucial role in guiding the students in this regard.

Special Programs for Advanced Learners

Opportunities exist for students to complement and enhance their learning experience by crediting additional courses in diverse areas. The institute also facilitates research at the undergraduate level. The regulation also permits students to complete their capstone project as a Semester credit transfer scheme in a reputed college like College of Engineering Pune, VJTI Mumbai, and Walchand College of Engineering Sangli. Also, students can do their final year project in Industry for one complete Semester. The vibrant set of student clubs and chapters of Professional Societies provide advanced learners to have hands-on experience in various domains of their choice.

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional information	Nil

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

Year	Number of Students	Number of Teachers
28/07/2020	3199	134

File Description	Documents
Upload any additional information	No File Uploaded

## 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:

SGGSIE&T Nanded introduced Curriculum, which emphasize student centric methods. The importance of student-centric methods and the three principal learning modes are given due weightage in planning the curriculum and this aspect is made a regular component in majority of the courses. Most of the core courses have either a regular laboratory or project-based learning as a component as part of the course.

Participatory Learning: Active Learning Methods (ALMs) like Group Discussions, Workshops, Assignments, Technical clubs, Hackathon etc. help the students whose learning style is in sync with Participatory Learning. Students are also encouraged to carry out the projects in groups. The group projects provide an opportunity for the students to learn with their peers, encourage teamwork and instil self-confidence. Every course at SGGSIE&T Nanded has been designed in such a way that students actively interact with faculty.

Experiential Learning: Most of the core courses have either a regular laboratory or project component as part of the course. The students have an opportunity to "Learn by doing" in many courses. This can be either through conventional laboratory or project-based learning. The system at SGGSIE&T Nanded utilizes various techniques like simulations, demonstrations, case studies, etc. in the implementation of Project Based Learning. Such hands-on experiential learning enhances the technical skills of the students at SGGSIE&T Nanded.

Problem Solving Methodologies: The teaching-learning process at SGGSIE&T, incorporates some mandatory innovative courses blended in the curriculum. Under-graduate engineering students should undergo courses like "Engineering Exploration", "Programming for problem solving" and "Minor and Major projects". The objective of this course is to identify real life problems and use engineering principles / technologies to address the problem. The solution is expected to be in the form of fabrication / coding / modelling / product design / process design / relevant scientific methodologies. While solving the problems, students are expected to take care of technical, economic, social, environmental, political, and demographic feasibility. The student should propose a business model/plan and explore the various funding opportunities for such ventures. The student is made aware of legal, regulatory, corporate social responsibility and tax related issues. The course on "Introduction to Innovative Projects" aims to develop innovative thinking skills and helps in building confidence to handle day-to-day issues. These courses in the curriculum enhance the learning experience of the students.

File Description	Documents
Upload any additional information	No File Uploaded
Link for additional Information	Nil

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

The learning characteristics of the current generation of students are increasingly inclined towards digital, web, and mobile-based technologies. In view of recent advancements in ICT, the teaching-learning process at SGGSIE&T has been realigned and redefined, so that it facilitates the implementation of all types of educational learning theories and delivery models that support and encourage innovative teaching and learning modalities, both for theory and lab courses. SGGSIE&T Nanded has taken care of the integration of ICT in education, inter alia, does promote autonomous learning, student-centered learning, higher-order thinking, problemsolving, cooperative learning, collaborative learning, social learning, and self-paced learning, and finally, integrated learning. SGGSIE&T Nanded is using WebEx, Google Classroom, and Moodle Learning Management System (LMS). Evaluation of student performance under various parameters over an extended period in the semester is being carried out through Moodle. The LMS platform is customized with a set of features that facilitates optimization of services, such as user management, course management, online editing, data storage, and access, visual analytics, academic tracking, accountability, session participation, attendance, mark assessments, tutorials, project evaluation, collaborative study, blogs and forums, and assessment of the performance. All classrooms are equipped with LCD, Wi-Fi, and SmartBoard. Each Department has a dedicated smart classroom with Lecture recording System. SGGSIE&T Nanded has a vast collection of online resources; faculty and students can use the digital library software called KOHA Library automation software and OPAC, as well as the Web OPAC system, which comprises full-text databases, e-journals, and e-books like ScienceDirect, Springer, IEEE, Taylor, and Francis, etc. It also contains electronic thesis databases like ProQuest. The institute strives towards becoming the epitome of excellence in the field of online education and allied areas. To facilitate these objectives, Institute is equipped with state-of-the-art facilities.

File Description	Documents
Provide link for webpage describing ICT enabled tools including online resources for effective teaching and learning process	<u>https://sggs.ac.in/home/page/ict-</u> <u>facilities</u>
Upload any additional information	No File Uploaded

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

## 2.3.3.1 - Number of mentors

#### 66

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

#### Process:

At the beginning of each academic semester, an Academic Calendar is prepared by Dean Academics. Academic Calendar covers all important dates for students such as the start of the semester, midterm examination, end term examination, holidays, result declaration date, the start of next semester, vacation, etc. The academic calendar is approved by the Director and released by the Dean of Academics.

On the basis of the Academic Calendar, timetables are prepared for each program. For full credit subjects, three to four hours per week; for half credit subjects, two hours per week, and for quarter credit subjects one hour per week are scheduled.

Respective Faculty is required to prepare and submit the teaching plan based on the course syllabus. Teaching Plans are submitted to Director through the Head of the Department and Dean Academics.

Teaching is conducted as per the teaching plan. Revisions of remedial sessions are conducted by the faculty as per the need. At the end of each semester, the respective faculty submits the Teaching Records, which records the actual sessions conducted against the plan.

#### Deployment:

The process of Academic Calendar, Time Tables, Teaching plan, and Teaching record is followed for UG as well as PG programs. Annual Quality Assurance Report of SHRI GURU GOBIND SINGHJI INSTITUTE OF ENGINEERING AND TECHNOLOGY, VISHNUPURI, NANDED

#### Benefits:

As the semester progresses, each faculty on regular basis updates the teaching record in the Moodle system. At the same time, a periodic review is taken by the Head of the Department, Dean Academics, and the Director. Therefore, it clearly helps the review process. This process helps in the review of faculty performance as well.

The Academic Calendar helps students get the full visibility of events that would happen during the year. The advance release of the Academic Calendar also makes sure the activities and events happen exactly as per the plan and these do not need additional communications.

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

#### 66

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	No File Uploaded

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

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	No File Uploaded

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

1803

File Description	Documents
List of teachers including their PAN, designation, Department and details of their experience	<u>View File</u>
Any additional information	No File Uploaded

## 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

## Nil

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	No File Uploaded

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

File Description	Documents
Upload the number of complaints and total number of students who appeared for exams during the year	No File Uploaded
Upload any additional information	No File Uploaded

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

Examination procedures and processes at SGGSIE&T Nanded: All examination-related processes and procedures are integrated into the indigenous software developed by the institute and are being continuously upgraded. All activities related to examinations including exam schedules, venue, and seating details, mark entry, grade processing, publication of results, paper seeing process, revaluation, and issue of consolidated grade sheet are carried out digitally.

Features of Examinations at SGGSIE&T Nanded: Written examinations are scheduled slot-wise as per the course registration of the students with all details on hall tickets. Both relative and absolute grading are practised based on the type and mode of the course and based on the number of students enrolled in a class.

Conduct of Examinations: Examinations are conducted in paper (normal) mode. With the faculty empowerment in action, faculty members are empowered to set their own question paper. However, there is also provision for setting common question paper for same courses offered in multiple batches.

Evaluation of Answer Scripts:

End Term Manuscripts are assessed by course coordinator at centrally in Examination section. Whereas Midterm manuscripts are assessed by individual course coordinator in the respective department.

Continuous Internal Assessment System: Continuous assessments carry an overall weightage of 40%. The assessments include written tests and several other assessment options. Written tests include Computer Based Tests (CBT), Open Notebook (ONB) Annual Quality Assurance Report of SHRI GURU GOBIND SINGHJI INSTITUTE OF ENGINEERING AND TECHNOLOGY, VISHNUPURI, NANDED

and Open Book (OB) type, in addition to the regular examination mode. ONB and OB examinations ensure that the students concentrate on developing their higher cognitive levels. The other assessment options include home assignments (both manual and digital), involvement in technical events, online courses, video recording, quiz, and several others. Rubrics are welldefined and communicated to the students in advance. All assessments are mapped to the appropriate course outcomes. The marks obtained in the continuous and final assessments are used to quantify the attainment of the course outcome. However, only the grades obtained by the student, in each course, are considered for calculating the programme outcome and programme specific outcome attainment.

Embedded Project Components: Courses with blend of theory, laboratory and project as applicable skills are assessed on all the three components to finalize the grades as per the ratio of their weightages.

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional Information	Nil

#### 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

SGGSIE&T Nanded has been following outcome-based teaching learning process since the year 2004. Currently, all programs of the institution have the generic Program Outcomes (PO) which ensure the attainment of graduate attributes. The programs also have Program Specific Outcomes (PSO), which address the program specific requirements. The PSOs are formulated taking into consideration the expectations of respective professional bodies of the program like UGC, and AICTE. The PSOs are formulated by a team of senior faculty members of the program during the curriculum design stage itself. The PSOs are approved by the respective Board of Studies (BoS) with representation from Industries, after due deliberation. At the

course level, all courses of the programme have well-defined set of course outcomes. The course outcomes are formulated during the syllabus design stage, and they address the higher order thinking capabilities. A team of faculty members handling the course formulate the COs and the same is deliberated and approved in the Board of Studies. The course outcomes are planned and designed to cover the entire syllabus and the designated competencies. The project and laboratory components of the courses also separate learning identities. A typical 3 credit course has about 6 course outcomes. Based on the specific requirements of courses the number of course outcomes vary. All the instruments used for evaluating the student performance, including assignments, quizzes, individual questions of continuous assessment tests and final assessment tests are mapped to specific Course Outcomes. This enables the precise quantitative valuation of attainment of course outcomes based on student's output. In all assessment processes, specific emphasis is given to test the attainment of higher order thinking skills.

Publicizing PO, PSO & Cos: The POs and PSOs of all programmes are published on the website of the Institution, and in the Syllabus books of programmes. POs and PSOs are displayed at the strategic locations in Schools. The POs and PSOs are made clear to all the students at the time of admission during the orientation programme. All course teachers make the course objectives, course outcomes, lesson plan schedule, detailed daywise session plan, evaluation pattern etc, clear to the students in the very first class of the course. In the Faculty Induction Programs all faculty members are exposed to the concept of Outcome Based Teaching Learning (OBTL) Process. Refresher programs are conducted for faculty members on the OBTL Process. Thus, the institution has in place a well-defined POs & PSOs for all programs and COs for all the courses. These details are published in the institution website and are integrated with the teaching learning and evaluation system of the institution.

Annual Quality Assurance Report of SHRI GURU GOBIND SINGHJI INSTITUTE OF ENGINEERING AND TECHNOLOGY, VISHNUPURI, NANDED

File Description	Documents
Upload COs for all courses (exemplars from the Glossary)	<u>View File</u>
Upload any additional information	No File Uploaded
Link for additional Information	https://sggs.ac.in/home/page/Curriculum- and-Syllabus

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

Implementation of OBE and assessment: Course outcome attainment is calculated from all course-related assessments. The assessment process uses both direct and indirect measures to measure the attainment of each outcome. The examples of such measures are given below:

I. Direct attainment is calculated through

- a) Examinations
- b) Assignments and quiz

c) Projects or any other instrument used by the faculty for assessment

II. Indirect Assessment

Course Survey is carried out for every course in each semester to get formal feedback from students for the courses offered in a semester and provide objective information to the faculty for self-appraisal, self-improvement, and development. Formal student feedback is obtained online or manually semester-bysemester mandatory course evaluation using a course survey form. The level of attainment of each Course Outcome is fixed at 60% across the Institute. The direct method (90%) is based on marks obtained in assessment and the indirect method (10%) is based on the student survey.

The level of attainment of each Course Outcome is computed using a macro-enabled excel sheet. A detailed summary of attainment of each Course Outcome is presented to the course coordinator and Head of Department, and the reasons for nonattainment are analyzed and an action plan report is also prepared. By Undertaking Course Assessments at the end of each course and finding out the strengths and shortfalls of the learning taking place, necessary changes in Teaching-Learning Process, Course Content, etc. are proposed by the course committee. These are taken into consideration whenever this course is offered in subsequent semesters.

#### Assessment of POs and PSOs:

The Course Outcomes are mapped to appropriate Programme Outcomes and Programme Specific Outcomes through the course and program articulation matrices, in a weighted manner. Programme Core (PC) courses are being taken for calculation of PO attainment and Programme Specific courses for PSO attainment. Weighted averages are used to calculate POs and PSOs, which are obtained using the course articulation and program articulation matrices. Since the institute follows a Credit System, students from different streams and batches attend the course. Therefore, the attainment of the POs and PSOs are calculated from the grades obtained by a specific batch of students at the time of graduation. This data is analyzed and is discussed in BoS/Academic council meetings. The BoS/Academic council recommends curriculum delivery methods, improvements in COs, and improvements in the curriculum as and when required. A comparative analysis of PO attainment of successive batches of students is also carried out.

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional Information	Nil

#### 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

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	No File Uploaded
Paste link for the annual report	Nil

## 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://sggs.ac.in/home/page/Faculty-Feedback-

### **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

SGGSIE&T Nanded accords high priority for the promotion of quality research. Accordingly, the Institution has a welldefined policy for promoting research and regularly updating the research infrastructure. The various Departments of the institution, in their annual budgets, allocate adequate resources for procuring and maintaining the state-of-the-art equipment and instruments. The institution also has centralized facilities and Center of Excellences to cater to the research needs of faculty members and students.

Some of the major research facilities augmented in the last five years are

- 1. Non-Mydriatic Retinal Camera: TOPCON TRC-NMGO
- 2. Thermal camera

3. Dell Precision T1700

4. High performance mobile computing Units and servers: Dell PoweredgeT40

	TECHNOLOGY, VISHNUPURI, 1
5.	GPU Server: Tyrone Camarero DS400TG-48R-2112PG
б.	GPU Processing Server: 32GB NVDIA GPU Server
7.	Dell OptiPlex 5080 Tower
8.	Wireless EEG Machine: Enobio 32 Channel
9.	Graphical Workstations 3: INVIDIA GPU
10.	Multispectral Camera and accessories
11.	Delta-V System RIO Hardware and Software
12.	Coriolis Mass Flowmeter
13.	Magnetic Flowmeter
14.	Vortex Flowmeter
15.	Guided Wave Level Radar
16.	Ultrasonic Level Meter
17.	Reciprocating Pump
18.	Central Fabrication facility
19.	Electric Discharge Machine (EDM),
20.	Wire Cut Electric Discharge Machine,
21.	Electro Chemical Machining (ECM),
22.	Electro Chemical Discharge Machine (ECDM),
23.	CNC Lathe, CNC Milling, Micro Electro Discharge Machine
24.	3D Printer
25.	AutoCAST (Casting simulation software)

Other than the equipment and instruments, the institute subscribes to important research journals such as Elsevier, Springer, IEEE, ASME and ASCE. The institution has also subscribed to Scopus indexing database. The various research laboratories and centres established in the recent past like Center of Excellence in Signal and Image Processing, Mentor Graphics lab, Emerson. The institutional research policy is uploaded on the website (https://sggs.ac.in/home/page/PIDA). To promote quality of research and to enhance the research output, the institution has launched various research promotion schemes, which include:

• Institutional Research Scholarship Scheme (IRSS): Ph. D fellowship of Rs. Rs.25,000/- p.m. for a period of 3 years to the full time Ph. D research scholars.

• Seed money grant to young faculty members to establish their research facility in SGGSIE&T Nanded through professional and Industrial Allowance Scheme (PIDA) of the institute.

• Through PIDA Scheme a "Research Award" to faculty members, as a financial incentive for (i) Quality Publications including journal publications, books, and book chapters (ii) Patents (iii) Funded Projects and (iv) Contribution to the 'h' index of the institution

• Institution also provides full financial support for participation in national and international conferences in India and Abroad. Open access publication in high impact factor publication is also supported.

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://sggs.ac.in/home/page/Research-in- the-Institute
Any additional information	No File Uploaded

### **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)

#### 23200

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	No File Uploaded

# **3.1.3** - Number of teachers who were awarded national / international fellowship(s) for advanced studies/research during the year

#### 0

File Description	Documents
e-copies of the award letters of the teachers	No File Uploaded
List of teachers and details of their international fellowship(s)	<u>View File</u>
Any additional information	No File Uploaded

## **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)

28.54075

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	No File Uploaded

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

4

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional Information	Nil
List of research projects during the year	<u>View File</u>

## 3.2.3 - Number of teachers recognised as research guides

### 35

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

File Description	Documents
Supporting document from Funding Agencies	<u>View File</u>
Paste link to funding agencies' website	Nil
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.

The institution has a well-established 'Technology Innovation and Entrepreneurship Center (TIEC). TIEC - Technology Innovation and Entrepreneurship Center is an initiative of Shri Guru Gobind Singhji Institute of Technology, Nanded for identifying entrepreneurial traits in the students building their capacity for entrepreneurship, and encouraging technology start-up on the campus. TIEC administers a business incubator that provides support to Technology-based entrepreneurs. Thus, the TIEC is an extension to the research carried out on the campus, which enables its monetizing either in form of technology or technology converted into a product, which makes it relevant to Industry and societal needs. SGGS-TIEC provides access to infrastructure, prototype development, research assistance, funding, business consulting etc., in a single window mode to early-stage technology entrepreneurs. It alsomakes use of the huge research infrastructure of the institute.Towards establishing a conducive innovation ecosystem, as part of the curriculum, all students undergo various courses like Engineering Exploration, Research Methodology, Patenting, Project Based learning. These projectbased courses enable students to learn through hands on projects. All Department of the Institute periodically organise various Hackathon, Design Thinking workshops, Codeathon and PRAGYYA, KRISHI PRAGYYA (a national level technical event), R-Magadon competitions for students to enhance their design thinking capabilities.

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional information	https://onlinesggs.org/phd/Research/index .php

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

Nil

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	No File Uploaded

### 3.4 - Research Publications and Awards

3.4.1 - The Institution ensures	А.	<b>A11</b>	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					
<b>Research Ethics in the research</b>					
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	No File Uploaded

**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

0			
File Description	Documents		
URL to the research page on HEI website	https://onlinesggs.org/phd/Research/		
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	No File Uploaded		

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

### 78

File Description	Documents
List of research papers by title, author, department, and year of publication	<u>View File</u>
Any additional information	No File Uploaded

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

2	1
4	т

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	Nil

### **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

69

File Description	Documents
Any additional information	No File Uploaded
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

### 736

File Description	Documents
Bibiliometrics of publications based on Scopus/ Web of Science - h-index of the Institution	<u>View File</u>
Any additional information	No File Uploaded

### 3.5 - Consultancy

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

### 10.18726

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	No File Uploaded
Any additional information	No File Uploaded

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

0

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	No File Uploaded
List of facilities and staff available for undertaking consultancy	No File Uploaded
Any additional information	No File Uploaded

### **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

SGGSIE&T Nanded strongly believes in the need for the holistic development of students and accordingly, the institution is putting forth consistent efforts in directing the students' energy towards addressing the real-life issues of the common man, and the society at large. In the Engineering Curriculum of SGGSIE&T Nanded, all students undergo a two-credit course on "Engineering Exploration" in which students as project teams take up a problem of the neighborhood community and come out with innovative technical solutions to these problems.

SGGSIE&T Nanded has over 17 clubs and chapters, which are active student bodies providing a platform for students to indulge in various co-curricular, extra-curricular, and outreach activities.

Following 17 clubs provide avenues, for direct interaction of the students with the society.

- 1. Bhaskarachyarya Mathematics club (for Mathematics loving students)
- 2. Team Sankalp
- 3. Team Drishti ( Institute Magazine)
- 4. VOICE Club: Small Things Make Big Difference.
- 5. PRAGGYA (National Level Technical Event Team)
- 6. UTSAV (Annual Cultural Event Team)

- 7. RNXG Club (Robotics Next Generation Club
- 8. MTrix
- 9. SAE-BAJA
- 10. Phonix
- 11. Zenith (Sports Club)
- 12. National Service Scheme (NSS) (To understand and serve the community)
- 13. Chitraksh Team-Photography Club
- 14. UPSC Chapter
- 15. FSDC-Fastal String Dance Club
- 16. Gandharv Drama Club
- 17. Avarh Music Club

The detailed account of objectives and activities of various student clubs is available on the website https://sggs.ac.in/home/page/Student-Activities

• Some of the significant outcomes of these initiatives are: The vigorous efforts of various clubs and chapters of SGGSIE&T Nanded have led to the planting of thousands of trees and improving the green cover all over campus. SGGSIE&T Nanded remains as an Institution with a large number of Blood Donations for more than 25years. Organizing National level technical event "PRAGYYAA" gives a platform to the students of all over India to showcase their technical talent. Annual State level sports event ZENITH gives a platform to all the students of the Maharashtra state to participate in sports activities.

File Description	Documents	
Upload any additional information	No File Uploaded	
Paste link for additional information	Nil	

**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

8

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	No File Uploaded

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)

0	
File Description	Documents
Reports of the events organized	<u>View File</u>
Any additional information	No File Uploaded

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

0	
U	
-	

File Description	Documents	
Reports of the events	<u>View File</u>	
Any additional information	No File Uploaded	

### 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

### 70

File Description	Documents	
Copies of documents highlighting collaboration	<u>View File</u>	
Any additional information	No File Uploaded	

**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)

3	
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	No File Uploaded

### 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.

Shri Guru Gobind Singhji Institute of Engineering and Technology Nanded is spread over 46 acres of land. There is a separate administrative building and 10 different Departmental buildings. Mostly all Departments have separate buildings and spaces as per AICTE requirements. The Institute has two buildings for boys' hostel to accommodate 600 students and three buildings for girls' hostel to accommodate 618 girls. In addition to this, the institute provides family accommodation to full-time Ph.D. students, guest rooms, medical attention, and hygienic food courts and mess. The Institute library has a separate two-storied block of 12400 sq. ft. surrounded by a lush green area. It has a stock of more than 56000 books and 4000 bound volumes of national and international journals. Institute currently subscribes to 72 National and 59 International journals annually. The reading room of the library is having a capacity of 250 students, where readers find a conducive environment for reading and study. Institute provides the common facilities like Auditorium, Open Air Theatre, Departmental stores, and canteens on campus. The campus is having round clock security, an uninterrupted power supply, High-Speed internet (1GBPS from NKN and 300 MBPS from Jio) with Wi-Fi connectivity throughout the campus. Institute operates a very efficient transport system with a fleet of 08 buses. On the sports front, the institute provides indoor facilities such as an air-conditioned well-equipped Gymnasium, Table tennis hall. Outdoor sports spacious arena includes a volleyball court, basketball court, cricket turf wicket ground, 400 m athletic track, tennis clay court with floodlights and badminton court. At SGGSIE&T Nanded strategies are adopted for delivering the teaching-learning process, which includes interaction and direct contact between the student and teacher in classrooms, laboratories, and libraries.

The classrooms: We have 35 Classrooms, which caters the needs of UG and PG programs, including specialized interdisciplinary programs. All the classrooms have LCD facility, Wi-Fi connectivity and equipped with smart board as well as white board. This facilitates multimedia presentation and enables lecture capturing. It is well equipped with facilities of effective teaching and learning as per AICTE (for UG & PG programs)

#### Teaching & Research Laboratories:

SGGSIE&T Nanded is very well equipped with laboratory facilities for hands-on training of UG and PG students. Additionally, it has specialized laboratories that provide interdisciplinary facilities with state-of-the-art equipment for PG & Ph.D. students to carry out their research work. We have 95 teaching and research labs in various programs. There are several laboratories funded by Industry including, Mentor Graphics, Emmerson-Pass Laboratory, Endress and Hauser Laboratory, Center of Excellence in Signal, and Image Processing.

#### Computing Equipment:

Currently, computing equipment has become the backbone network of any discipline and smartphone and Wi-Fi enabled for students. With foresight, SGGSIE&T Nanded has established IT infrastructure that has been widely spread across academic buildings, laboratories and hostels using high speed robust network with access to Internet through multiple ISPs. All computers are connected to the internet over high-speed cables facilitating a 1:3 availability of computer to students. The computer laboratories cover many cutting edge research sectors, such as Networking & Pervasive, Cloud Computing & Data Analytics, Analog & Digital Circuits, Artificial Intelligence to mention only a few. SGGSIE&T Nanded provides uninterrupted access to information and network services with 1.1 Gbps of internet bandwidth and over 25 Wi-Fi access points. The security solutions from McAfee, CISCO AMP & K7 etc. are used to secure campus IT facilities.

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional information	Nil

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

At SGGSIE&T Nanded, students are groomed to have a holistic personality. To be mentally and physically fit, SGGSIE&T Nanded provides state-of-the-art facilities with magnificent, airconditioned state-of-the-art gymnasia, playgrounds, stadiums, indoor courts as well as several centers for physical education and sporting activities that help students stay as fit as a fiddle. These facilities develop a spirit of sportsmanship in students. Turf Pitched Cricket Ground, Basketball Court with Floodlights, Lawn Tennis Court with Floodlights, Volleyball Courts, Kabaddi Ground, Football Ground, Indoor Table Tennis Hall, Sports Hall for The Hostel Students Open 24/7 which Includes Table Tennis, Chess, and Carrom Boards.

Outdoor Sports:

1. Outdoor Stadium: The 400m track and field at ground has flood light, and Turf Pitched Cricket Ground

2. Synthetic Basketball courts: These were established with flood light to fulfil the student's needs.

3. Synthetic Tennis Courts: Tennis courts fulfil the students' needs, with flood light and

4. Volleyball Courts: Volleyball court is established to fulfil the students `needs with flood light and audience gallery arrangements

5. Badminton courts: Badminton courts (Men & Women) have been established with flood light

Indoor Sports:

```
1. State-of-the-art Air-Conditioned Gymnasium
```

2. Yoga Hall and Table Tennis Hall

These facilities also enable the institution to organise various sports competitions including ZENITH, the annual state level sports, and cultural fest.

### Cultural Activities

At SGGSIE&T Nanded, education is confined not only to academic excellence, but also to the overall development of students. To meet this objective, SGGSIE&T conducts various events through the 17 clubs & chapters. The institution has adequate infrastructure facilities to successfully conduct all these activities through the available auditoriums, seminar halls and smart classrooms. These facilities also enable the institution to organise PRAGYYA and UTSAV, the annual national technical event and social gathering.

File Description	Documents	
Geotagged pictures	<u>View File</u>	
Upload any additional information	No File Uploaded	
Paste link for additional information	Nil	

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

35

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)**

### 59.58283

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	No File Uploaded

### 4.2 - Library as a Learning Resource

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

SGGS Library is situated in a separate two-storied block of 1126.66 sq. M. surrounded by a lush green area. It began its existence in 1981. It has an ample stock of 75,513 books and 3959 bound volumes of National and International journals. It is the most lively place on the campus providing a safe, comfortable, and friendly environment that enables learning and advancement of knowledge and promotes innovation. Besides this, we have Book Bank Scheme for Scheduled Caste and Scheduled Tribe students. We also have subscriptions to multiple copies of National, regional, and local newspapers and magazines. We have an attractive Reading Room having a capacity of 250 students, where readers find a conducive environment for reading. We also provide an earn & learn facility for the students of economically weaker sections, where they can work in the library and can also earn through it. The mission of the Central Library is to facilitate the creation of new knowledge through the acquisition, organization, and dissemination of knowledge resources and providing value-added services.

#### Features:

Collection for Competitive Examinations like UPSC, MPSC, GATE, CAT, GRE, etc.

Collection of Marathi books of renowned authors

Collection of books on Sports, Yoga, etc.

Book bank scheme for SC, ST students

Reference books available in the night library

Display of Newspaper

Earn and learn facility

Information display and notification

Library Automation: KOHA Library automation software, OPAC, as well as the Web OPAC system, is made available in the Library. Web OPAC link - http://10.70.2.55, Circulation of books started using KOHA software. This has modules for book acquisition, cataloging, circulation, and serial management periodical management). Members can browse and search the library collections with extended bibliographic details using Web-OPAC (federated search) facilities. The library has adopted ICT applications and implemented technological innovations to improve user experience. Facilities such as self-check-in and check-out, along with an online renewal facility with SMS and email alert provide a seamless user experience. The book circulation facility (self-issue and return) using RFID technology is offered. Library dues are collected through the online payment gateway system. RFID Technology and biometric authentication. This KOHA has a true enterprise-class ILS with comprehensive functionality, which includes modules for acquisitions, circulation, cataloging, serials management, authorities, flexible reporting, label printing, multi-format notices, offline circulation when internet access is not available.

Digitization Facility:

The Central Library is equipped with a modern, high-speed scanner and photocopy facility, which follows the copyright act.

Online Journals:		TECHNOLOGY, VISHNUPUKI, NAN	
IEEE IEL Online			
ASME			
ASCE			
Elsevier			
ACM Digital Library			
SpringerLink			
IEEE Wiley e-books			
Springer e-books			
File Description	Documents		
Upload any additional information		No File Uploaded	
Paste link for additional information	Nil		
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	No File Uploaded		

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

### 11.10766

File Description	Documents
Audited statements of accounts	No File Uploaded
Any additional information	No File Uploaded
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

2

File Description	Documents
Upload details of library usage by teachers and students	<u>View File</u>
Any additional information	No File Uploaded

### 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

Central IT Cell is established for Technical Support and maintains the policies governing the use of SGGSIE&T Nanded computing and IT communication resources. The IT Policy applies to the resources administered by the administrative departments such as libraries, Computer Laboratories, Offices of the Institution, Hostels, and Guesthouses wherever the network facility is provided by the Institution.

Further, the entire faculty, students, staff, departments, authorized visitors/visiting faculty, and others who may be granted permission to use the IT Infrastructure, must comply with the guidelines. Certain violations of IT policy laid down by SGGSIE&T by any institution member may even result in disciplinary action against the offender by institution authorities. The Acceptable use of policies are applicable to Employees, Students, Vendors & Visitors. IT Cell have framed various policies like Procurement, Installation of Hardware, Network and Software. E-mail account has been facilitated to employee, and students under E-mail Use policy which is reviewed and maintained whenever the modification happens. Website Hosting and Database Usage policy has its method and hierarchy which is followed systematically.

SGGSIE&T Nanded has proper budgeting process to meet the IT budget needs of every department. Requirement gathering happens at departments. Once the IT budget is finalized at the department level, the approved budget is consolidated at IT Cell and arrive the total IT Budget requirement. IT infrastructure has been widely spread across connecting all buildings with very high-speed robust network backbone. Our computer network is built on CISCO switching platform with backbone running on 11. Giga at present. 1200+ IP enabled devices are connected to this fast network. Understanding the demands of faculty and students to use digital media for their research, teaching & learning process, 1.1 Gbps of internet bandwidth is made available through two major Internet service providers. Over 25 Wi-Fi access points are positioned across the campus to facilitate internet access to our students, faculty, and guests while they are in the campus. Seamless internet access given to students through Hotspots and wellplanned Wi-Fi network at Hostel rooms. The comprehensive infrastructure includes physical servers with storage for Private Cloud implemented for the students to work with engineering software anytime, anywhere and from any device. Our campus IT facility secured by implementing the best of the security solution from Palo Alto, McAfee, CISCO. AMP and K7 which includes Next Generation firewall, Application firewall, Email Security, Advance Malware Protection, Endpoint Threat Protection, Openness etc.

IT expansion is done based on assessing the requirement and understanding the need of implementing the best of the breed technology to support the teaching and learning process. Also meticulous in the assessment of the industry requirement with respect to advancement in technology and ensure our students are aware of the technologies prevailing in the market.

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional information	Nil
4.3.2 - Student - Computer ratio	

Number of Students		Number of Computers
3132		1190
File Description	Documents	
Upload any additional information		No File Uploaded
4.3.3 - Bandwidth of internet of the Institution and the number on campus		A. ?50 Mbps
File Description	Documents	
Details of bandwidth available in the Institution		<u>View File</u>
Upload any additional information		No File Uploaded
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		C. Any two of the above
File Description	Documents	
Upload any additional information		No File Uploaded
Paste link for additional information	https://ww	w.youtube.com/channel/UC6BIQ8sv DgwPlu1dCT60eqQ
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)** 

318.4675

File Description	Documents
Audited statements of accounts	<u>View File</u>
Upload any additional information	No File Uploaded

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.

SGGSIE&T Nanded has put in place standard procedures and practices which are aimed to provide excellent infrastructure facilities and periodic maintenance of them. The Planning and Monitoring is done by committee members comprising of Director, Dean Planning, Registrar, and Site Engineer, who periodically review the utilization and maintenance of infrastructure in the campuses.

Procedure for Maintaining and Utilizing Academic Facilities and Library:

The Site Department directly takes care of the physical infrastructure like classrooms, Faculty cabins, Admin Offices, School offices, Laboratories, Galleries, Seminar halls, Auditoria, Hostels, Gardens, and Circulation Areas, and various Sports Complex. The below-mentioned procedures are adopted for utilizing and maintaining various infrastructure facilities:

Classrooms and laboratories are allotted by Institute Timetable In-charge. Seminar halls, and auditoriums are booked and allocated using the online. Facility management team supervised by a Site Engineer takes care of maintaining the physical infrastructure facilities like classrooms, all seminar halls, gallery halls, lifts, etc. Maintenance related complaints are monitored through Call monitoring system and their reports are logged appropriately. Vehicle Incharge takes care of booking of transport facilities for taking the students on Industrial Visits, official meetings of faculty and staff. Each department has its own staff that include mechanics and technicians to maintain the lab equipment under the guidance of Lab In-charge who is a faculty member in the program. Lab equipment is maintained by the dedicated technicians in the labs on a periodic basis during summer/winter vacations. Many departments have Annual Maintenance Contracts (AMC) with suppliers and companies

for the repair and maintenance of key equipment. Value added courses, Remedial learning classes, Summer and Winter semester for weak senior students, Preparation for TOFEL/GRE/GMAT/NET/GATE/UPSC etc. and other training programs for Campus Placements are conducted, during week-ends besides the regular teaching hours. Central Library is fully air-conditioned and equipped with state-of-theart of technology such as KOHA, RFID self-check-in book drop and check-out kiosk, Touch screen KIOSK for library information display, Discussions rooms, Video conferencing facility, CCTV etc. Central library works on all 365 days in a year and is well-utilized.

Procedure for Maintaining Computers and IT related equipment:

IT Cell is responsible for the upkeep and maintenance of all IT related and electronic equipment including computers and surveillance cameras. IT Cell has on its role many system administrators, technicians and instructors who are responsible for repair and maintenance of equipment and computers including network related issues and surveillance system.

Procedure for Maintaining Physical Infrastructure Facilities:

The maintenance department under Site Engineer and Electrical maintenance Incharge Professor maintains the physical infrastructure on the campus which includes both breakdown and preventive maintenance of facilities. There are several experienced Civil and Electrical Engineers and dedicated technicians to maintain the AV system in classrooms and labs whose service can be availed upon request. These staff report to the site Engineer who ensures that classrooms, laboratories and other academic areas are functional and well maintained. Scheduled and annual maintenance contract is in place for all major electrical equipment such as air conditioners and lifts. Periodical maintenance of utilities like Housekeeping, Power supply, Sewage Treatment & Reverse Osmosis plants, Water supply, Fire Hydrant systems and Public Address systems are carried out and the same is entered in the log book. There are housekeeping activities by Log sheets. Horticulture department looks after the premises for making the campus look clean and green.

Procedure for Maintaining Sports Facilities:

Sports section has full-fledged Sports Incharge, Instructors, and Grounds men who maintain and clean the sports facilities and grounds. All regular maintenance works are managed by the Physical Education Department, while all major works are addressed by the Site Department.

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional information	Nil

### 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

### 1974

File Description	Documents
Upload self-attested letters with the list of students receiving scholarships	<u>View File</u>
Upload any additional information	No File Uploaded

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

0		
File Description	Documents	
Upload any additional information	No File Uploaded	
Institutional data in prescribed format	<u>View File</u>	
5.1.3 - The following Capacity and Skill Enhancement activit organised for improving stude capabilities Soft Skills Langua Communication Skills Life Sk Physical fitness, Health and H	ties are ents' age and cills (Yoga,	

Awareness of Trends in Technology	
File Description	Documents
Link to Institutional website	https://sggs.ac.in/home/page/Student- Activities
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

8	
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 to mechanism for redressal of str grievances, including sexual h and ragging: Implementation of statutory/regulatory bodies awareness and implementatio with zero tolerance Mechanism submission of online/offline st grievances Timely redressal o through appropriate committ	udents' arassment of guidelines Creating n of policies m for udents' f grievances

File Description	Documents
Minutes of the meetings of students' grievance redressal committee, prevention of sexual harassment committee and Anti-ragging committee	No File Uploaded
Details of student grievances including sexual harassment and ragging cases	No File Uploaded
Upload any additional information	No File Uploaded

### 5.2 - Student Progression

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

### 289

File Description	Documents
Self-attested list of students placed	<u>View File</u>
Upload any additional information	No File Uploaded

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

### 13

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	No File Uploaded

**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

### 20

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

3

File Description	Documents
e-copies of award letters and certificates	<u>View File</u>
Any additional information	No File Uploaded

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

The institute has an active Student Council with representatives from all the programmes of the institute. The Student Council is appointed every year through a rigorous selection/election process assessing students' academic performance, leadership qualities, non-scholastic participation, and co-curricular & extracurricular achievements. The Student Council has a unique structure that includes both final and pre-final year students. The final year students serve as Executive Members while junior students are the secretaries.

Student Council:

The Council oversees the activities of different student clubs and chapters. The Student Council for each academic year is inaugurated officially where the members take pledge to support the student community and act as a bridge between the students and the administration. In addition, the members of the Student Council play a pivotal role in enhancing the quality of various academic processes in the institution. They also represent the student community to hostel authorities and the canteen committee to ensure good quality nutritious food is served in the hostels. The Student Council organizes various events of national importance, universal values and many Governments of India initiatives like Swachh Bharat Mission, Unnat Bharat etc., in the institute. The Student Council also takes part in many socially relevant projects for community through various outreach events. Majority of the student council members also serve as Programme Representatives (PR). PRs are nominated for every academic programme with healthy representation from both genders. PRs take part in QC and department level PR meetings. During these meetings, PR students directly interact with the Dean and the HOD as well as Director. The following issues are generally discussed during these meetings:

- Any syllabus related difficulties.
- Request for the additional support for improving students' performance.
- Any issues pertaining to classroom teaching.
- Steps taken by the department to address issues that had risen out of previous QC and PR meetings.
- Special request for field projects, internships, placement, and training.

• Analysis of the class performance in the continuous assessment examination and any issues raised by the class students to the PR. Student conveners are selected to plan and participate in annual technical festival-PRGYYA and cultural festival-UTSAV. These events are self-governed by students with various committees such as registration, publicity, finance, events, and documentation etc. The entire process is digitized and paper free. The student teams work meticulously to maintain safety and security during these events.

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional information	Nil

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

3

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	No File Uploaded

### 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

SGGSIE&T Nanded has one of the largest alumni networks. The following are the salient features of the SGGSIE&T Nanded alumni network:

There are several Alumni chapters across the country and outside the country including the USA, UK, Germany, Singapore, and UAE. The SGGSIE&T Nanded Alumni Association, a registered body in India, has been functioning from the institute campus. The main aim of the association is to maintain the link between the institution and the alumni and share information on mutual growth, achievement, and advancement in various fields. Besides, SGGSIE&T Nanded Alumni Association conducts various social activities such as blood donation and health check-up camps, tree planting events, etc. for the benefit of society. It also conducts various competitions for school kids to identify, promote and nurture the talents among the school students. The alumni employed in reputed organizations in India and abroad help the final year students in their project work and inform them about the employment opportunities in their respective organizations. They also help in getting internships and placements for present students and organize Industrial visits. The Institute, in turn, provides free access to the library and assists budding alumni entrepreneurs to incubate technology ventures. Our alumni are invited to deliver lectures to the students about the current scenario and the recent developments in industries. SGGSIE&T Alumni members provide Sadbhavana scholarships to needy students every year. The Sadbhavana Scholarship Awards are presented to meritorious students from economically poor backgrounds at the Alumni meet. Alumni have made prominent contributions to field who the of Academics & Research, Corporate Career, Entrepreneurship

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and Social Development are honoured with the **`SGGS** and their success stories are written in the form of ICons, books. Main highlights of the SGGSIE&T Nanded Alumni Association website (https://www.sggsalumni.org/#): Maintains up-to-date information about alumni and their activities Acts as a professional and personal information sharing platform Increases the leverage of the alumni network for the benefit of the alumni Improves the modes of Alumni-Alumni and SGGS-Alumni communications Alumni can submit their accomplishments in the 'Alumni Achievements' section Alumni members can view jobs posted by other alumni and can • also post jobs for fellow alumni **File Description** Documents Upload any additional No File Uploaded information Paste link for additional Information Nil 5.4.2 - Alumni's financial contribution A. ? 15 Lakhs during the year **File Description** Documents

### GOVERNANCE, LEADERSHIP AND MANAGEMENT

### 6.1 - Institutional Vision and Leadership

Upload any additional

information

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

No File Uploaded

Academic and Administrative Governance

SGGSIE&T Nanded is an autonomous institute established by Government of Maharashtra and governed by AICTE and UGC regulations. The statutory bodies of the institute are Board of Management (BoM), Planning Committee, Finance Committee, Academic Council, and Board of Studies, constituted as per the UGC norms. The deployment of world class education starts with curriculum framing at department level committee which benchmarks the programme against renowned institutes. The proposed content and pedagogy is recommended by the Board of Studies to Academic Council for approval. The approved programmes are explored for implementation by the Academic Dean and IQAC Cell and further taken up with BoM for final approval. Once approved, the programme is further refined based on the feedback by students, teachers and industry experts. The teachers are empowered to adopt or change the content based on advancements in the field and student's feedback. The IQAC recommends innovative practices and ensures effective implementation.

#### Research and Consultancy Governance

To become world class, an institute should be innovative and research oriented. To facilitate research ambience and innovative culture, separate offices of Research and Development and Industrial Consultancy is created. This office is headed by Dean Research and Development who formulate policies and procedures on all matters related to Research and Consultancy for approval by Director and BoM. Another office, Patent Cell facilitates patenting for faculty and students. In addition, specialized research centers for trans and interdisciplinary areas have also been created. A unique Innovation Lab functions to promote inter-disciplinary projects. Each course has a separate module to address the current development connected to the field wherein the participation of industry experts brings out the latest developments. The Department and Research Centres conduct conference/ symposia/ hackathons for promoting research and innovation.

### Faculty and Students Governance

Happy people are the most productive. The establishment office explores and recommends welfare schemes as per Government of Maharashtra norms like medical benefits, study leave, sabbatical leave, on-campus accommodation etc., for faculty and

staff. The Academic Staff College organizes relevant training programmes for the professional development of faculty. The Students Interface Committee (SIC)that operates under Dean students Affair helps the students to resolve academic and personal problems. Collaborative Research is essential for visibility and funding. SGGSIE&T Nanded has established culture of collaboration in Academics and Research with premier institutes in India and abroad for faculty and student exchange. The office of Placement bring in industry collaboration in terms of consultancy, internships and placements. In addition, Office of Accreditation helps to enhance national and international visibility. Without serving the society, no research is complete. SGGSIE&T Nanded participates in various social welfare schemes targeted towards the community through Unnat Bharat scheme for Sustainable Rural Development and Research Studies, Higher Education Club, NSS, and various clubs and chapters.

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional Information	https://sggs.ac.in/home/page/Vision-and- Mission

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

SGGSIE&T Nanded has adopted decentralization, participative management and empowerment in all academic, administrative, finance, research and outreach activities. The administrative structure reflects completely decentralized system with welldefined roles and responsibilities. SGGSIE&T Nanded provides ample opportunities to its major stakeholders viz. students, faculty, staff, alumni and employers to participate in the development of the institute. The stake holders have representations in all statutory bodies and university level committees / cells.

There are 10 Departments headed by Heads of the Department, entrusted with the responsibility of maintaining high standards in academics and research. The weekly meetings organized at various levels i.e. Institution and Department ensure smooth communication among administrators, faculty, staff and students and effective implementation of the decisions. The leadership quality among students is cultivated by empowering them to organize major techno-cultural festivals like PRAGYAA and UTSAV.

In academics, the faculty members decide on all matters right from formulation of syllabus to question paper setting and evaluation. To improve the teaching-learning process, feedback is obtained from the students through quality circle meetings and end semester feedback.

The course content can be modified based on the inputs from the stakeholders, with the approval of the Department Head and subsequent ratification by the Board of Studies, which comprises of industry experts, external academia, and internal faculty members. Various committees at Department level involve faculty, staff, and students to independently manage the activities related to quality assurance, placement and training, alumni engagement, clubs, and chapters, conduct of conferences, seminars, workshops, guest lectures and arrangement of field visits.

In Academic research, scholars can choose their guide and research problem. The doctoral committee directs the course of research, right from prescribing course work, approving research topic, monitoring the progress and approving the submission of synopsis and thesis. Continuous

progress in academic research and funded projects is facilitated by Department Head Dean Research and Development. Financial Governance:

SGGSIE&T Nanded follows a decentralized approach in financial management. At the department level, the budgetary requirements for teaching, learning, research and outreach activities are consolidated and forwarded to the Dean Finance. A team of senior faculty members of the department analyse the requirements and prepare the budget. The Departmental level budgetary requirement is submitted to the Institute level committee. The committee finalizes the draft budget for the Department and forwards the institutional budget to the Finance Committee, the approval. After approval by the Finance Committee, the approved budget is utilized through Purchase to Payment. The institute attaches high priority to outreach activities for the benefit of society. The students and faculty members take part in many socially relevant projects for community welfare through various outreach events .

File Description	Documents
Upload strategic plan and deployment documents on the website	<u>View File</u>
Upload any additional information	No File Uploaded
Paste link for additional Information	https://sggs.ac.in/home/page/Strategic- Plan

### 6.2 - Strategy Development and Deployment

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

Strategic plan has been formulated in tune with the vision of the institute to excel in teaching, research, and innovation. In the year 2015, the plan was chalked out to make SGGSIE&T globally visible and to achieve a rank within top 100 among the national level institutes. Today, after six years of execution of the plan, the institute has been chosen as one of the Institutes of Eminence and ranked 4th in ARIA ranking at national level.

The salient features of the strategic plan are:

To offer more programmes and courses in multi- and/or transdisciplinary areas

To improve the percentage of faculty to be trained in India and abroad through collaborative research

To increase the global visibility

To increase the number of research labs including a centralized sophisticated instruments `facility to promote cutting edge research.

To increase the number of academic activities with a strong focus on applied research with social impacts.

One of the successfully implemented activities under global visibility is to improve in the national and international rankings, which has reflected as 4th rank in ARIA 2020 national level ranking. Towards reaching this aspect of the strategic goal, the Institution had formulated the following set of action plan.

• Focus on Interdisciplinary research areas and establishing research infrastructure including (i) Center of Excellence in Signal and Image Processing (ii) Industrial Robotics Center (iii) Mentor Graphics Lab (iv) Endress and Hauser lab (v) Emerson Pass and (vi)Technology Innovation and Entrepreneurship Center (TIEC)

• Introducing interdisciplinary programmes in emerging areas like Data Science, Cyber Physical Systems, Wearable Technologies, Artificial Intelligence and Deep Learning

• Research to focus on Product Development, IP Generation and Commercialization.

• High quality talent acquisition

• To ensure high faculty retention the institution implements a set of measures and policies including implementation of 7th Pay commission pay scales, complete academic freedom, and conducive research ambience

• Emphasis on publishing in peer reviewed journals with high impact factor

• Sponsorship of publication fee for open access publishing

• Financial assistance for participation in reputed international conferences

• Special scheme for inviting Professors as Visiting / Adjunct Professor

• Establishing functional collaboration for Research / Faculty Exchange / Student Exchange with top 200 universities

• Enhancing interaction with various industries for student internships & projects, consultancy, and industry sponsored laboratories

• Securing international projects and strengthening international collaboration and joint research

File Description	Documents
Strategic Plan and deployment documents on the website	<u>View File</u>
Paste link for additional information	https://sggs.ac.in/home/page/Strategic- Plan
Upload any additional information	No File Uploaded

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.

### Statutory Bodies

All the statutory bodies of the institution are constituted as per UGC and AICTE norms, and they meet periodically to formulate polices, critically review the progress made and offer suggestions for institutional development.

The Board of Management (BoM), constituted as per UGC norms, is the apex body which formulates all policies and procedures and provides academic and administrative leadership. The Planning Committee translates the strategic vision of the institution into concrete yearly plans and monitors their implementation. The Academic Council reviews the regulations, curricula and syllabi of various academic programmes offered and recommends for approval by the Board of Management. The Finance Committee approves the budget, monitors the budgeted spending and reviews the internal and external audited reports. It also monitors the resource mobilisation process and ensures allocation of resources for future needs.

### Administrative setup of the Institute

The day-to-day functioning of the institution is taken care of by the Officers of the Institute, namely, 1) Director 2) Dean Finance and Resource Mobilization, and Quality Assurance 3) Registrar 4) Controller of Examinations 5)Account Officer 6) Dean Academics 7) Dean Research and Development 8) Dean Students Affair 9) Dean Procurement and Incubation 10) Director Industry Liaison and Incharge T&P 11) Heads of Departments 12) First Year Coordinator 13) Dean IT Services 14) TEQIP

### Coordinator.

Director is the Principal Executive Officer of the institution who leads all its activities and is responsible for implementation of the decisions of the statutory bodies. The Registrar is the administrative head of the institution and coordinates all administrative activities and appointments in the institute. The Registrar represents the institution in all official meetings and legal proceedings. Dean Academic assist Director for Academic activities. Dean finance assist Director in Financial management. Dean Procurement helps in procurements of the institute. Dean Industry Liaisoning helps to have collaboration with Industry and placement of students. Dean Students Activity manages all students related activities. Dean IT Services helps in creating IT infrastructure and networking. TEQIP Coordinator executes TEQIP program in the institute.

The institution has 10 Departments. Faculty members are attached to the departments, and report to department heads. Dean Research and Development is responsible for identifying cutting edge research areas and promoting research activities.

The institution has well-defined and transparent policies including service rules, recruitment procedures and promotion norms. The institution also has various grievance redressal bodies such as grievance redressal committees for students, faculty and staff members.

File Description	Documents
Paste link to Organogram on the institution webpage	https://sggs.ac.in/home/page/Administrat: on-Chart
Upload any additional information	No File Uploaded
Paste link for additional Information	Nil
6.2.3 - Implementation of e-go areas of operation: Administra and Accounts Student Admiss Support Examination	ation Finance

File Description	Documents
ERP (Enterprise Resource Planning) Documen	No File Uploaded
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	No File Uploaded

### **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

### Performance Appraisal System

SGGSIE&T Nanded follows a comprehensive Performance Appraisal System (PAS) to assess the performance of teaching and nonteaching staff on an annual basis. In the performance appraisal for teaching staff includes teaching, research and service with appropriate weightages. For Assistant Professors, more weightage is given to teaching, whereas for Professors the emphasis is more on research. The Maharashtra Government has prepared this performance appraisal form and office of establishment section of institute circulates it to the employees through Head of the department and section heads. Teaching staff carry out the self-appraisal, which is followed by that of HoDs and Deans. Besides, students' feedback on the teaching-learning process is included as a part of the PAS. Performance appraisal of non-teaching staff is carried out based on the nature of the job they perform. There are 5 categories of non-teaching staff, namely, Section Heads and other officers/Laboratory support staff / Sr. Asst., Jr. Asst., Programmer, Data Entry Operators / Attenders /Electrical Maintenance Section, Security personnel and Drivers. A welldefined, transparent, norms-based promotion scheme is followed for teaching and non-teaching staff.

#### Welfare Measures

The institute recognises the service and dedication of the teaching and non-teaching staff members and offers them various welfare measures as per Government norms such as:

Annual Quality Assurance Report of SHRI GURU GOBIND SINGHJI INSTITUTE OF ENGINEERING AND TECHNOLOGY, VISHNUPURI, NANDED		
• Employment Provident Fund & Gratuity		
• Pension Scheme/ Contributory provident funds		
• Mediclaim Insurance / Accident Policy for Employees and Dependents		
	ampus health centre facilities to cater ments of employees and students	
• Encashment of Earned Leave		
• Women employees can a	vail 26 weeks of maternity leave	
• Residential accommoda on availability	ation in campus on subsidized rent, based	
• Teaching staff are provided PhD allowance, sabbatical leave to pursue higher education/research, seed money for research, and financial support for attending conferences		
• Teaching staff are encouraged to take up consultancy work		
• Reward for publication of quality research papers / patents/ projects/ and books		
• Laptops are issued to teaching staff while at service to pursue research and academic work.		
File Description	Documents	
Upload any additional information	No File Uploaded	
Paste link for additional information	Nil	
-	ided with financial support to attend conferences / nt of membership fee of professional bodies during the	

8

File Description	Documents
Upload any additional information	No File Uploaded
Details of teachers provided with financial support to attend conference, workshops etc during the year (Data Template)	No File Uploaded

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

4

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.)

94

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	No File Uploaded

### 6.4 - Financial Management and Resource Mobilization

6.4.1 - Institution conducts internal and external financial audits regularly

SGGSIE&T Nanded follows the standard system of accounting and complies with the guidelines of Government of Maharashtra. It has a well laid down internal control mechanism by internal auditors, audited independently every quarter, apart from an in depth annual statutory audit carried out by reputed external auditors. Periodical monitoring of expenditure, compared with the approved budget, is carried out.

#### Internal audit

Internal audits are conducted once in every quarter. R. Seth & Associates is involved in conducting internal audit during which vouching of bills, random checking and scrutiny of high value bills are done. The audit is generally conducted for 10 days and the report is submitted to the institute within a month. The internal audit is used to monitor the accounting process on a continuous basis. The audit objections raised during internal audit are rectified and recommendations for process improvement are implemented.

External audit

External audit is conducted every year. M/s Kabra and Maliwal , a renowned Chartered Accountants firm in Nanded conducts the audit. The audit starts (for the previous year) at the end of April and is completed in September. For the current year (for half-yearly period), the audit starts in December and ends in a month. Mechanism for settling audit objections During audit, the queries raised are addressed by the finance team and the rectification entries are made. Explanation to the queries is given within 15 days' time and the rectification entries are made within the next 10 days. Auditor reviews the audited financials, and after discussion with the Management, signs the financials before filing of returns with the income tax department. Areas of improvement are suggested by the auditor for implementation in the subsequent year. Typical suggestions that were implemented in the last five years are:

1. Bank reconciliation procedure for various e-Transfers

2. TDS reconciliation with 26AS

3. GST implementation on various auxiliary services

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional information	Nil

# 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)

File Description	Documents
Annual statements of accounts	No File Uploaded
Details of funds / grants received from non-government bodies, individuals, philanthropists during the year	<u>View File</u>
Any additional information	No File Uploaded

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

Financial planning and budgeting (operational expenses and capital investments) are an integral part of annual academic planning at the institute. The institute follows the procedure listed below to mobilize resources and utilizes the fund for its activities in a systematic manner.

- By a collection of tuition fees from students, as approved by the fee committee of the Government of Maharashtra, through account transfer or demand draft or online transfer.
- 2. By getting 12 (B) status from University Grants Commission (UGC).
- 3. By promoting consultancy services which will result in collaborations and brand building.
- 4. Encouraging faculty members to apply for funding from various Government agencies will help to improve the research output, infrastructure landscape by acquiring hitech equipment, manpower with the appropriate skill set, and overheads to the Institute.
- 5. By translating the patents and other IPR generated by the Institute into commercial products and processes.
- 6. By facilitating incubation/start-ups with the Technology Business Incubator (TBI) to utilize the infrastructure

available and expertise from the faculty.

- By offering new programs or interdisciplinary courses in emerging areas, which are in sync with the industry requirements.
- 8. By offering courses for industry personnel, working people either on part-time or weekend basis. This will help the working population without disturbing their schedule and the Industries to collaborate with SGGSIE&T Nanded.
- 9. By offering value-added courses.
- 10. By exploring the avenues available through MOU's signed with foreign universities.
- 11. By mobilizing funds through interest earned on corpus fund.
- 12. By establishing more student chapters and clubs and driving their activities through sponsorship/ enrolment etc.
- 13. By conducting Short term courses, workshops, and training programs for people from Industry, Academics, and Students to bridge the gap and knowledge transfer.
- 14. By collecting rent from shops let out, cafeteria, mess and health center, besides electricity and water charges as per consumption.
- 15. By collecting hostel rent from students.
- 16. By providing Guesthouse services to visitors on a chargeable basis.
- 17. By creating a corpus from Alumni contributions.
- 18. By exploring funding from Corporate / International Foundations/ NGO's etc.
- 19. By attracting donations to the trust corpus by leveraging the tax exemption availed under 80G of the Income-tax act.

Optimal utilization of resources

1. Continuous implementation of online systems to simplify the finance functions, thereby improving the skill set and multitasking ability of the employees.

2. Energy-saving measures through the installation of solar plants and buying energy through the power purchase agreement.

3. The process of integrating all the departments through automation systems is in progress resulting in cost-saving and leading to a paperless offices in the future.

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional Information	Nil

# 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)

# Institutionalizing Experiential Learning

Since 2018, SGGSIE&T Nanded has been extensively following the Project Based Learning (PBL) pedagogy. In this regard we have included course on Engineering Exploration at first year level of UG program. The implementation of PBL has facilitated handson learning and resulted in substantially enhancing the higher order thinking skills of students. Some of the important learnings from over three years of practice of PBL are as follows:

- Provides a strong context for learning new ideas and concepts
- Enables accelerated learning and facilitates higher order thinking
- Appeals to slow learners and motivates them to perform well
- Reduces the gap between theory and practical applications

The IQAC reviewed the implementation of PBL in 2019 and decided to continue it further by proposing the idea of organising institute level Hackathons and and state level R-Magadon. As a maiden effort, 24 to 48 hour Hackathon and R-Magadon events with industry collaboration were organised, which provided great learning experience to the students. The competitive ambience of 'hackathon' events accelerated the learning pace and enabled deeper understanding of concepts and applications. It also facilitated team work and collaborative learning among students. With successful experiences these events, organising Hackathon, R-Magadon, and various competitions in PRGYYAA has evolved as a regular event. The institution allocates annual budget for organising the 'PRAGYYA' a national level technical event, to encourage activity based learning. To promote experiential learning, schemes such as Summer Research Internship Programme were floated by Center of Excellence in Signal and Image Processing in 2015, which proved to be a very successful venture. This summer research scheme was institutionalized from the AY 2015-16 onwards and the winners are honoured by the institute. In addition, UG students are encouraged totake-up projects in niche areas namely 3D printing, Wearable technology, Bio-inspired design, IoT & Cyber Physical Systems and VR & AR.

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional information	Nil

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

The IQAC institutionalized the process of reviewing the teaching-learning process through Students' end semester feedback, Outgoing students' survey and academic audit. Students' feedback is used as an important tool to close the loop for the teaching-learning process. The student feedback are collected at least twice in a semester to get the feedback on teaching- learning process from the students to take steps for mid-course corrections. The suggestions received from the students are passed on to the concerned faculty and HoDs to review and take suitable action. The students' end semester feedback on teacher, course and lab infrastructure is collected through institutional online feedback system. The outgoing students also provide valuable feedback on their overall academic experience. The feedback collected are analysed and presented in the IQAC meetings. The meetings result in making recommendations for improvement in the learning experience of students. Academic audit is regularly conducted by IQAC to review the academic process in the Department. The guidelines for audit are prepared as per NAAC/UGC quality framework and a brain storming session on the audit report is organized to review and recommend measures for quality enhancement.

File Description	Documents	
Upload any additional information	No File Uploaded	
Paste link for additional information		Nil
6.5.3 - Quality assurance initia institution include Regular mo IQAC Feedback collected, and used for improvement of the i Collaborative quality initiativ institution(s) Participation in other quality audit recognized	eeting of the alysed and nstitution es with other NIRF Any	A. Any 4 or all of the above
national or international agen ISO Certification)	•	
national or international agen	•	
national or international agen ISO Certification)	cies (such as	Nil
national or international agen ISO Certification) File Description Paste the web link of annual	cies (such as	Nil View File
national or international agen ISO Certification) File Description Paste the web link of annual reports of the Institution Upload e-copies of	cies (such as	

# 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

"Social Development" & "Respect for All" are two of the core values of SGGSIE&T Nanded. As a measure of translating these core values into concrete action plans, the institution had taken several measures on the promotion of gender equity. In all its activities, the institution ensures the participation of women. As part of the curriculum content on Gender, Culture & Technology, Ethics & Values, Right to Education - Women, Minority, Equality & Environment and Gender, Caste & Law address issues

related to gender. As part of these course, students learn the

issues related to women empowerment, female feticide prevention, child abuse, responsible living and others. Some of the specific measures initiated by the institution to ensure female students participation in

all academic, co-curricular and extra-curricular activities are

• Providing for adequate and safe hostel space for female students

• Special security, during night hours, for female students to engage in various activities like studying in library, attending group activities and extracurricular & co-curricular activities.

• In night hours, women security guards to accompany female students during their transit 24x7. Availability of lady doctor in the campus hospital

• A gynaecologist visits the campus hospital every week to cater the needs of female students and staff.

• Gender sensitization programs for all students, faculty and staff members.

• Special self-defense workshop for female students in their hostels

• Special sports promotion programs for female students - for instance SGGSIE&T Nanded has a female football and cricket teams that takes part in inter University Competitions.

• Exclusive gymnasium slots for female students

• Common room for female students in all academic Department.

• A mandatory workshop on Prevention of Sexual Harassment in workplaces was organized for all faculty members to create and maintain an environment free of sexual violence, harassment, exploitation and intimidation

• The entire campus is covered with CCTV cameras to provide a sense of security to inhabitants particularly women

• The institution employs women security guards The Institution also conducts many awareness programs for female students. Some

of the programs organized include celebration of International Women's day every year. Thus, the Institution ensures to a gender-sensitive ambience, gender-sensitive people and special drives for women empowerment.

File Description		Documents	
Upload any additional information		No File Uploaded	
Paste link for additional Information		<u>https://</u>	sggs.ac.in/home/page/Gender- Equity-Policy
7.1.2 - The Institution I alternate sources of en conservation: Solar en plant Wheeling to the energy conservation U power-efficient equipn	ergy an ergy Grid S se of LH	d energy Biogas ensor-based	A. Any 4 or All of the above
File Description		Documents	
Geotagged Photographs			<u>View File</u>
Any other relevant infor	mation		No File Uploaded
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)			
Solid waste mana	gemen	t and waste	recycling system
Organic and green waste, recyclable waste, and sanitary waste are collected in different bins. Segregated food waste, vegetable peels, and other kitchen wastes collected from the canteens and food joints on campus are composted. Similarly, garden waste and dry leaves are also composted. Recyclable wastes are collected and sold to vendors for recycling. Sanitary waste is given to a certified agency on alternate days for incineration. The institute's waste management & recycling policy supports our goal to reduce the number of wastes entering the waste stream. Liquid Waste Management			

The wastewater generated is treated in the sewage treatment. This is then recycled and used for flushing purposes or watering the gardens and lawns in the campus. The sludge settled in the Sewage treatment is removed frequently a month and composted. The compost is used as manure for the gardens. Thus, the entire wastewater generated in the campus is well treated and effectively used.

#### E-Waste Management

E-wastes, which are regularly collected from source points, are sent to the e-waste storage area. E-waste mainly consists of laptops, desktops, servers, projectors, biometric devices, condemned electronic equipment, printers, scanners, and cartridges. This e-waste is written off frequently and sold out to vendors.

Hazardous chemicals and radioactive waste management

Overall, labs using chemicals and solvents follow the necessary safety precautions in the usage and disposal of hazardous chemicals. All equipment using radioactive elements for their functioning are carefully salvaged as per the instructions of the respective user manuals. The institution doesn't explicitly use radioactive materials in its research.

File Description	Documents
Relevant documents like agreements/MoUs with Government and other approved agencies	No File Uploaded
Geotagged photographs of the facilities	<u>View File</u>
Any other relevant information	No File Uploaded
7.1.4 - Water conservation fac available in the Institution: Ra harvesting Bore well /Open we Construction of tanks and bur water recycling Maintenance bodies and distribution system campus	ain water ell recharge nds Waste of water

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
<ol> <li>Restricted entry of aut</li> <li>Use of bicycles/ Battery vehicles</li> <li>Pedestrian-friendly pat</li> <li>Ban on use of plastic</li> <li>Landscaping</li> </ol>	v-powered	
File Description	Documents	
Geotagged photos / videos of the facilities		<u>View File</u>
Various policy documents / decisions circulated for implementation		No File Uploaded
Any other relevant documents		No File Uploaded
7.1.6 - Quality audits on envir	onment and en	ergy undertaken by the institution
<ul> <li>7.1.6.1 - The institution's initial preserve and improve the envelopment of the</li></ul>	ironment and	B. Any 3 of the above

File Description	Documents
Reports on environment and energy audits submitted by the auditing agency	<u>View File</u>
Certification by the auditing agency	No File Uploaded
Certificates of the awards received	No File Uploaded
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	No File Uploaded
Details of the software procured for providing assistance	No File Uploaded
Any other relevant information	No File Uploaded

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).

While enjoying the wide diversity of culture among its students and faculty, SGGSIE&T Nanded has been successfully maintaining harmony and peace all through these years without any single episode of campus unrest. SGGSIE&T Nanded remains committed to

the culture of celebrating diversity leading to a higher-level unity. An atmosphere of a 'home away from home is vital for students and faculty, for nurturing a harmonious academic environment. Festivals are a celebration not only of our beliefs, but also of our differences. At SGGSIE&T Nanded, festivals like Ganapati, Diwali, ShivJayanti, Dandiya, Christmas, Eid, Navaratri, Durga Puja, Baisakhi, Holi and Gudipadwa are celebrated with gusto. SGGSIE&T Nanded every year organizes "UTSAV"- a showcase of cultures around the nation. This program, by students of various states, is a magnificent display of the diverse national culture. It is also a show of unity in diversity. Furthermore, cultural festivals like Garba Night (Navratri celebrations), Baisakhi celebrations, Ganesh Chaturthi, Shiv Jayanti, and Ambedkar Jayanti celebrate various aspects of our cultural heritage like dance, music, and food, all around the year. Apart from this, SGGSIE&T Nanded hosts several agricultural expos like KRISHI PRAGYYA in support of local farmers and offers its sports facilities for tournaments among local schools. True to the motto "A Place to Learn, and A Chance to Grow", SGGSIE&T Nanded focuses on growth of not only on knowledge, but also the holistic development of integrated personality of the students

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:

SGGSIE&T Nanded aspires to build the holistic development of its students and employees and accords due emphasis on inculcating Constitutional and Social responsibilities. The institution organizes various events towards this objective. A representative list of activities focused on inculcating the values and responsibilities as a responsible citizen are

- At the second-year level, every student must complete a course on the Indian Constitution. In this course, all the students get knowledge of rights and responsibilities as responsible citizens of India.
- 2. The vibrant student clubs like the Voice Club provide a platform for students to discuss "Every vice nagging

society and the human condition".

- 3. The debating club of the SGSSIE&T Nanded hones the debating skills of students.
- 4. Over and above this the Institution also initiates measures to inculcate a sense of social responsibilities among students and employees. Some of these measures are:
- 5. Social Internships to UG students.
- 6. Blood donation camps on the campus at frequent intervals in which students and faculty members actively participate.
- 7. Adaptation of villages under the Unnat Bharat Abhiyan (UBA) and working for this village through the active involvement of students
- 8. Special drives to propagate the merits of Social Entrepreneurship among students.
- 9. Awareness campaign on Environment, Climate Change, and Sustainability

File Description	Documents	
Details of activities that inculcate values necessary to transform students into responsible citizens		<u>View File</u>
Any other relevant information		No File Uploaded
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		B. Any 3 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	No File Uploaded
Any other relevant information	No File Uploaded

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

SGGSIE&T Nanded organizes national and international commemorative days, festivals, and events.

# National Festivals

- Baisakhi historical and religious festival in Sikhism and Hindus, and is usually celebrated on April 13 or 14 every year.
- Gudhi Padva is a spring-time festival that marks the traditional New Year for Maharashtrians is also celebrated in SGGSIE&T Nanded.
- 3. Navaratri, the nine-night Hindu festival, Eid, and Christmas day are being celebrated.
- 4. Ganpathi festival is celebrated for 10 days in the month of September every year.

International Days Celebration

International Women's Day is celebrated on March 8 every year at SGGSIE&T Nanded. Eminent women personalities are invited to address the staff and the students. International Day of Yoga is celebrated on the 21st of June every year. SGGSIE&T Nanded organizes a Yoga session on this day to promote the importance of Yoga in improving the mental and physical well-being of all the people in SGGSIE&T Nanded.

#### National Day Events

SGGSIE&T Nanded organizes Republic Day, Independence Day, Maharashtra Day, and University Foundation day celebrations where the students and the faculty participate to the full extent. Further, to sensitize the students on the freedom struggle.

Teachers' Day

SGGSIE&T Nanded celebrates the birth anniversary of the former President of India and a renowned teacher Dr. S. Radhakrishnan as Teachers' Day.

The institute also commemorates the following birth /death anniversaries of the prominent Indian personalities every year.

- 1. Mahatma Gandhi Jayanti
- 2. Lal Bahadur Shastri Jayanti
- 3. Jawaharlal Nehru Jayanti
- 4. Swamy Vivekananda Jayanti
- 5. Birth anniversary of APJAbdul Kalam
- 6. Ambedkar Jayanthi
- 7. Guru Nanak Jayanti
- 8. Boodha Poornima
- 9. Birth anniversary of Savitribai Phule
- 10. Birth anniversary of Chatrapati Shivaji Maharj
- 11. Birth anniversary of Mahatma Jotiba Phule
- 12. Birth anniversary of yashwantrao Chavan
- 13. Birth anniversary of Mahatma Basweshwar
- 14. Birth anniversary of Ahilyadevi Holkar
- 15. Birth anniversary of Maharana Pratap
- 16. Birth anniversary of Annabhau Sathe
- 17. Birth anniversary of Vasantrao Naik

18. Birth anniversary of Krantiveer Nanasaheb Patil

# 19. Birth anniversary of Valla Bhai Patel

#### 20. Birth anniversary of Indira Gandhi.

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	No File Uploaded

# 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

Good governance practices:

- 1. Positions of Head and Deans are on a rotation basis.
- Weekly Meetings of Heads and Deans every Wednesday for discussion of issues and regular feedback on the conduction of classes and practicals.
- 3. Centre of Excellence in Signal and Image processing, Industry-sponsored Labs - VLSI Design and Verification, Endress Houser Process Control Lab, Emmerson Process Automation Lab, SAI Technology-Center for Development in Cybersecurity, State of art Industrial Robotics training center, etc.
- 4. Fully transparent procurement through GeM Portal: E-Tendering for all eligible types of tenders.
- 5. Diesel Gen-set 650 KVA, Solar Power and Power from State Electricity Board made available to avoid power failures during theory and practical hours.
- 6. The responsive Feedback system for human resources and students in place
- 7. Grievance mechanism in place
- 8. Cleanliness of campus Green campus Solar power 500KVA, RWH, recycling of water for gardening.
- 9. Wi-Fi Enabled Campus with Wi-Fi in Hostels as well.

- 10. Online digital library for textbooks and research journals to all students through the Knimbus app.
- 11. e-Shodhsindhu support from AICTE for Elsevier Resources.
- 12. Bio-Gas plant from Food Waste in Boys and Girls' mess.
- 13. Grievance through the personal meeting Evening 6.00 PM to 7.30 PM every day - Director is available for attending students' grievances.
- 14. Students interface committee (SIC) Consisting of three students from each class - A topper, a middle level, and bottom level (academic). Usually, the middle level is a girl selected. A feedback mechanism - meeting once in a fortnight for knowing problems of students and corrective action (discussion in Weekly meeting of Heads and Deans).
- 15. Declaration of results within one week of last examination being successfully practiced since 2004. All Examinations as per Exam reforms policy of AICTE, During Pandemic - all academic activities completed in Online mode including Virtual Labs for a few courses and Online evaluations.
- 16. Prepare and adhere to the Academic Calendar for the academic activities of the semester.
- 17. CBCS system to accommodate liberal learning courses -Courses from MOOCs platform, Credit transfer from MOOC -NPTEL-SWAYAM.
- 18. Statistical relative grading for academic performance
- 19. Project-Based Learning: Engineering Exploration
- 20. Academic Audit by experts from IIT, NIT, and Tier-1 colleges in the state.
- 21. Credit transfer facility from NPTEL/Swayam, and other institutes like COEP, WCE, VJTI and SP COE, Mumbai
- 22. Innovation Ecosystem Through Problem/Project-based learning pedagogy
- 23. Students' participation in hackathons and other national competitions
- 24. Foreign language courses Conducted in a batch of 40 students (regularly free of charge)
- 25. 3 weeks Induction program for first-year Importance is given on Human values and professional ethics, Introduction of Engineering, Academic Rules and regulations, special motivational lectures, Lectures on mental health, Avoiding participation in Ragging menace, IT act and cyber awareness, etc.
- 26. Laboratories are managed by students and made available 24X7
- 27. Social Internships to make aware the students about societal problems, work with NGOs for getting acquainted

with issues for probable solutions in higher classes

- 28. Three mandatory internships
- 29. Culture of paper, book chapters, monogram, and book writing with keen interest for getting global visibility in publishing research and collaboration.
- 30. Good national and international collaboration with academic, research organizations, and leading industries.
- 31. Laboratories and research proposals supported by industry
- 32. Consulting to infrastructure development of the region.
- 33. Culture of conduct of Short Term Courses, Conferences for improving connectivity with institutes and industry
- 34. Help state and national initiatives of social concern.
- 35. A separate web portal for Alumni Activities; Yearly Alumni Meet, Alumni Association and its chapters, Alumni Support to various academic activities like funding of projects and awards.
- 36. Regular participation in Baja competition organized by SAE India for design and development of all-terrain vehicle and are National winners once in 2020, runners up in 2019
- 37. Participation and prizes in Many sports events Inter-University, Intra University
- 38. Publication of Annual Magazine Team Drishti Won best magazine award for many yrs.
- 39. Conduct of Annual technical Event PRAGYAA from 2005, Utsav - Annual Social Gathering since inception, Zenith -State level Annual Sports event since 2012.
- 40. Good placement record Alumni Connect Publication of SGGS ICONS two books with stories of 60 successful alumni

File Description	Documents
Best practices in the Institutional website	Nil
Any other relevant information	Nil

# 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)

After becoming an autonomous institute, SGGSIE&T Nanded has been committed to research by treating it as the epicenter of growth and development in all directions. Such an approach has always been driven by the farsightedness of a robust research

culture that is imperative for building an ideal society that aims at the development of the people and the country in its entirety. This would, in turn, mean that research culture is fundamental to the growth of a society, as it would groom a potential and knowledgeable population with a high sense of rationality and utmost commitment to society. However, admittedly, unlike the developed countries, a culture of research is largely missing in our institutions of higher education, which are the major centers for enriching manpower at all levels. Keeping this in view, SGGSIE&T Nanded has been making sincere attempts to inculcate research culture from undergraduate levels. Looking at this requirement, firstly, we have established a state-of-the-art Center of Excellence (CoE) in Signal and Image Processing on 3024 square feet area. This CoE research related to medical imaging and Signal Processing by using Machine Learning and Artificial Intelligence is carried out by UG, PG, and Ph.D. students. Secondly, we have established an Industrial Robotic center to develop skilled manpower in Robotics and Computer Vision. Thirdly, we have established SGGS-SAI Center for Research and Development in Cyber Security

File Description	Documents
Appropriate link in the institutional website	https://sggs.ac.in/home/page/center-of-ex cellence-in-signal-and-image-processing
Any other relevant information	No File Uploaded

7.3.2 - Plan of action for the next academic year

Future plan for Academic Year 2021-22:

- Up-gradation of teaching-learning facilities through modern classrooms ICT tools and modernization of Laboratories with high-end equipment.
- Establishing an IDEA laboratory for students will inculcate innovative thinking for solving society-related problems.
- An increasing number of Industry supported projects.
- Collaboration with other premier institutes at national and international levels.
- Organizing STTPs, Workshops, Seminars, and Conferences for giving training on advanced technologies.
- Continue to work as a leading institute in the Marathwada region for catering facilities to nearby institutes.

# • Increasing participation of students at national and international level in research, curricular and co-curricular activities.