

## YEARLY STATUS REPORT - 2020-2021

Part A			
Data of the Institution			
1.Name of the Institution	SENGUNTHAR ENGINEERING COLLEGE		
• Name of the Head of the institution	Dr.K.UMADEVI		
• Designation	PRINCIPAL		
• Does the institution function from its own campus?	Yes		
• Phone No. of the Principal	04288255716		
Alternate phone No.	04288250444		
Mobile No. (Principal)	9842755552		
• Registered e-mail ID (Principal)	info@scteng.co.in		
• Address	KOSAVAMPALAYAM, KUMARAMANGALAM POST,		
• City/Town	TIRUCHENGODE		
• State/UT	TAMIL NADU		
• Pin Code	637205		
2.Institutional status			
<ul> <li>Autonomous Status (Provide the date of conferment of Autonomy)</li> </ul>	24/06/2019		
• Type of Institution	Co-education		
• Location	Rural		

Financial Status	Self-financing
• Name of the IQAC Co-ordinator/Director	Dr.P.PONMURUGAN
• Phone No.	04288255716
• Mobile No:	9698730088
• IQAC e-mail ID	iqac@scteng.co.in
3.Website address (Web link of the AQAR (Previous Academic Year)	http://scteng.co.in/IQAC/NAAC
4.Was the Academic Calendar prepared for that year?	Yes
• if yes, whether it is uploaded in the Institutional website Web link:	http://scteng.co.in/Academics/Aca demicSchedule

## **5.**Accreditation Details

Cycle	Grade	CGPA	Year of Accreditation	Validity from	Validity to
Cycle 1	A	3.06	2015	15/11/2015	14/11/2020
Cycle 2	A	3.06	2020	15/11/2020	31/12/2024

6.Date of Establishment of IQAC

31/12/2014

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
INSTITUTION	World Intellectual Property Day	SC	'T	03/05/2023	L O
INSTITUTION	World Environment Day	IF	:I	05/06/2023	L 0
INSTITUTION	Cyber Security - Need of the hour	IE	:I	27/05/2023	L 0
INSTITUTION	World Water Day	IE	I	22/03/2023	L 0
	test notification regard of the IQAC by the HI	•	View File	2	
<ul> <li>composition of composition of composition of compliance to compliance to</li></ul>	•	EI ne year ng(s) and	View File 3 Yes	2	
<ul> <li>composition of composition of composition of complexity of</li></ul>	of the IQAC by the HI tings held during the nutes of IQAC meeti o the decisions taker	EI ne year ng(s) and site?	3		
<ul> <li>composition of ion of io</li></ul>	of the IQAC by the HI tings held during the nutes of IQAC meeti o the decisions taken the institutional web	EI ne year ng(s) and site? the rt y	3 Yes		
<ul> <li>composition of iQAC mee</li> <li>Were the min compliance to uploaded on</li> <li>If No, please meeting(s) an</li> <li>0.Did IQAC received</li> </ul>	tings held during the nutes of IQAC meeti o the decisions taken the institutional web upload the minutes of d Action Taken Report ve funding from any support its activities	EI ne year ng(s) and site? the rt y	3 Yes No File U		

Ranked as AA+ in India's Best Engineering Colleges by Career 360° in the year 2021, Received 4.5 Golden Star Certification from MHRD -IIC (Institution's Innovation Council)

NCC Cadets participated at Guard of Honour in Unit Level Inspection, Two NCC Cadets were participated in Republic Day Camp Selection Training held at Idayappati

Yavarum Kelier Thiran Valar Sangam, Saathanaiyalar Viruthu - 2021, Dr.C.Venkatesh, Principal - "Best Principal Award", Dr.K.Umadevi, Professor and Head, Department of EEE - "Best Teacher- Engineering Award", Dr.C.Aarthi, Professor and Head, Department of ECE, "Best Teacher- Engineering Award".

Department of EEE organized National Level Short Time Training Programme by AICTE grant in aid of Rs.3,57,667 on AI - Based Novel Power Distribution and Correction Technology from 2.11.2020 to 7.12.2020 (Four Weeks - Nov 02-07,2020, Nov 23-28,2020, Nov-Dec 30-05,2020, Dec 07-12,2020)

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
College Admission, Placement, Result, Cocurricular Activities, MSME, Research Promotion,IIC, Funding Proposals activity mentioned later	To work towards getting the best ranking status among the colleges in and around Namakkal. An organization would like to set up an Entrepreneurial Association with the identification of the Alumni Association which has spread across the world at various prominent positions since its inception. It is decided to utilize their services in a diplomatic way in skills, start- ups, etc., by identifying the appropriate Alumni. Therefore, IQAC makes the necessary arrangements to exchange ideas with all Alumni Association in order to promote Entrepreneurship and Start-ups. e -Content development facilities the importance of

online classes is fully
recognized by all academic
institutions during the pandemic
situation of COVID lockdown.
Keeping the importance of online
teaching in the future in view,
the college decided to make
available the e-Content useful
to the students by improving
facilities of e-Content
development. To encourage the
faculty members to pursue PhD
for the quality betterment of
their career. In addition, the
quality publications are also
instead for their further
improvement. To aim for
conducting a minimum of two
international conferences per
year. To offer Hands-on Training
along with certificates which
make the student's profile
better and it will command
better placements with the
industries.
비행 사람은 것 같은 것

<b>13.Was the AQAR placed before the statutory body?</b>	Yes
• Name of the statutory body	
ne fer die Gescher die Scherken zur die Ferdie die Beiserse Beiser die Gescher Beiserse Beiser. Die Gescher Beiserse Beiserste Beiserste Beiserste Beiserste Beiserste Beiserste Beiserste Beiserste Beiserste B	
Name of the statutory body	Date of meeting(s)
IQAC Board Meeting	21/12/2020
14.Was the institutional data submitted to AISHE ?	Yes
• Year	
Year	Date of Submission
31/01/2020	31/01/2020

View File

623

345

## **Extended Profile**

## 1.Programme

1.1	9		
Number of programmes offered during the year:			
2.Student			
2.1	623		
Total number of students during the year:			
2.2	228		
Number of outgoing / final year students during the year:			
File Description	Documents		

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	View File
3.Academic	

## Academic

3.1

Number of courses in all programmes during the year:

Institutional Data in Prescribed Format

File Description	Documents
Institutional Data in Prescribed Format	<u>View File</u>
3.2	140

3.2

Number of full-time teachers during the year:

Extended Profile		
1.Programme		
1.1	9	
Number of programmes offered during the year:		
2.Student		
2.1	623	
Total number of students during the year:		
2.2	228	
Number of outgoing / final year students during t	he year:	
File Description	Documents	
Institutional Data in Prescribed Format	<u>View File</u>	
2.3	623	
Number of students who appeared for the examinations conducted by the institution during the year:		
File Description	Documents	
Institutional Data in Prescribed Format	<u>View File</u>	
3.Academic		
3.1	345	
Number of courses in all programmes during the year:		
File Description	Documents	
Institutional Data in Prescribed Format	<u>View File</u>	
3.2	140	
Number of full-time teachers during the year:		
File Description	Documents	
Institutional Data in Prescribed Format	<u>View File</u>	
3.3	140	

Number of sanctioned posts for the year:	
4.Institution	
4.1	525
Number of seats earmarked for reserved categories as per GOI/State Government during the year:	
4.2	40
Total number of Classrooms and Seminar halls	
4.3	804
Total number of computers on campus for academic purposes	1
4.4	25995873
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 is designed by keeping in mind the developmental needs of the society with the guidelines proposed by the UGC, AICTE, Anna University and the TN State Council for Higher Education. The Curriculum is designed to develop the Skills of the students not only domain dependent , but also domain independent like Communication Skills, Self learning, Teamwork and it improves the design ability, analyzing ability, testing ability and synthesis ability.

#### Curriculum development Process:

The Departmental Committees which comprising team of senior faculty members and Head of the department identify and assess/evaluate in order to make the curricula of the programmes /courses relevant to such needs. This task is done by involving the experts from academia and industry; taking into account the

feedback obtained from various stakeholders namely students, alumni, employers and faculty members. The initial phase for ensuring academic quality is the design of the curriculum, in particular, the types of courses, the number of electives, and the curricular structure, with complete details of the course title and course contents based on Blooms Taxonomy as per the regulations. The next phase, the Course Outcomes (COs) for every course is mapped with the Program Outcomes (POs) and Program Specific Outcomes (PSOs) of the program.An effective implementation of this Outcomes Based Education (OBE) ensures that our graduating engineers can compete on a global platform, and have expected global attributes. The Institute keenly observes the attainments of PO and PSO for the respective programs which in turn relates to Vision and Mission of the institution and Department as well. The course designers prepare course outcomes with corresponding Bloom's level and target level of attainment followed by course design

File Description	Documents
Upload additional information, if any	<u>View File</u>
Link for additional information	http://scteng.co.in/documents/IQAC/AQAR/AQ AR2020-2021/1.1.1.pdf

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

#### 12

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

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

46

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

## 1.2 - Academic Flexibility

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

### 22

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

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

9

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

## **1.3 - Curriculum Enrichment**

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

The institution integrates cross cutting issues relevant to

gender, environment and sustainability, human values and ethics by introducing specific courses in the curriculum and various activities such as Orientation Programmes for first year students, Women empowerment programmes through Women Development cell (WDC), Carrier Counseling, NSS/YRC/NCC activities. These courses train students to apply analytical thinking in solving issues.

#### Gender:

Gender Sensitivity Courses like Women Development-Issues and Concerns, Women Empowerment, Women's Rights Awareness and Women's Studies educate the students on gender equality. Women Empowerment Cell addresses the grievances and concerns of the girl students. The cell organizes various activities such as lectures, seminars, panel discussions, Women awareness programs, role plays etc., to create awareness among the girl students.

The academic courses that address these issues are

- Constitution of India
- Professional Ethics in Engineering
- Human Rights

#### Environment and Sustainability:

Each UG degree programme has included with Environmen

The institution integrates cross cutting issues relevant to gender, environment and sustainability, human values and ethics by introducing specific courses in the curriculum and various activities such as Orientation Programmes for first year students, Women empowerment programmes through Women Development cell (WDC), Carrier Counseling , NSS/YRC/NCC activities. These courses train students to apply analytical thinking in solving issues.

#### Gender:

Gender Sensitivity Courses like Women Development-Issues and Concerns, Women Empowerment, Women's Rights Awareness and Women's Studies educate the students on gender equality. Women Empowerment Cell addresses the grievances and concerns of the girl students. The cell organizes various activities such as lectures, seminars, panel discussions, Women awareness programs, role plays etc., to create awareness among the girl students.

The academic courses that address these issues are

- Constitution of India
- Professional Ethics in Engineering
- Human Rights

Environment and Sustainability:

Each UG degree programme has included with Environmental Science as a separate course. It enables a holistic understanding of the environment and develops favorable attitude and habits to protect and preserve nature. Environmentalists from various areas are invited to discuss the current issues related to the present scenario. Number of programmes like awareness campaigns, Seminars and environmental development projects to involve students to work towards environmental sustainability. The constant effort of the NSS team in the Swatch Bharat Mission promotes cleanliness and hygiene in the campus and surrounding areas.

The academic courses that address these issues are

Environmental Science

and Engineering

Transport and Environment

Disaster Management

Air Pollution and Control Engineering

Municipal Solid Waste

Management

Industrial Pollution Prevention and Cleaner Production

Hospital Waste Management

Integrated Water Resources

Management

Ground Water Contamination and Quality Monitoring and Modeling

Climate Change and its Impact

Groundwater Engineering

Air and Noise Pollution Control
Waste Water Treatment
Water Resources Systems
Engineering
Water Supply
Engineering
Engineering Geology
Geo-Environmental
Engineering
Environmental and Social Impact Assessment
Wastewater
Engineering
Structural Dynamics and
Earthquake Engineering

Traffic Engineering and

Management

Environment and Agriculture

Professional Ethics & Human Values:

Courses are offered on Professional Ethics and Values, Legal aspects of Business, Consumer behavior to develop professionally accepted standards of personal and business behavior, values and guiding principles. It also helps the students to understand the values and how to reflect them in their attitude and behavior and contribution to the society. Extension activities like NCC, NSS and Sports which is mandatory in the curriculum develop leadership skills, promote culture representation and instill human values and social responsibility.

The academic courses that address these issues are

- Human Rights
- Professional Ethics in Engineering
- Hospital Management
- NSS / YRC /RRC
- Legal Aspects of Business
- Organizational Behaviour
- Consumer Behaviour
- Customer Relationship Management
- Labour Legislations

In addition to these courses, the institution has Women Development Cell (WDC), counseling cell and antiragging cell to deal with the issues relevant to gender, human values and ethics. With an emphasis on the need of counseling the young minds, counseling cell is constituted to address the student's behavioral and academic issues. It strives to provide an admissible atmosphere to the students by organizing personality development camps to overcome the gender differences, conducting training programmes for the students and staff on counseling.

Anti-Ragging cell plans the activities like Anti-ragging campaign, formation of anti-ragging squad, Debate, Skits, Awareness talk by Government officials for curbing the ragging menace and making the students aware of human values. The cell addresses the complaints by the students, scrutinizes and approves the reports of the Antiragging Squad.

The academic courses that address these issues are

Environmental Science

and Engineering

Transport and Environment

Disaster Management

Air Pollution and Control Engineering

Municipal Solid Waste

#### Management

Industrial Pollution Prevention and Cleaner Production

Hospital Waste Management

Integrated Water Resources

Management

Ground Water Contamination and Quality Monitoring and Modeling

Climate Change and its Impact

Groundwater Engineering

Air and Noise Pollution Control

Waste Water Treatment

Water Resources Systems

Engineering

Water Supply

Engineering

Engineering Geology

Geo-Environmental

Engineering

Environmental and Social Impact Assessment

Wastewater

Engineering

Structural Dynamics and

Earthquake Engineering

Traffic Engineering and

Management

Environment and Agriculture

Professional Ethics & Human Values:

Courses are offered on Professional Ethics and Values, Legal aspects of Business, Consumer behavior to develop professionally accepted standards of personal and business behavior, values and guiding principles. It also helps the students to understand the values and how to reflect them in their attitude and behavior and contribution to the society. Extension activities like NCC, NSS and Sports which is mandatory in the curriculum develop leadership skills, promote culture representation and instill human values and social responsibility.

The academic courses that address these issues are

- Human Rights
- Professional Ethics in Engineering
- Hospital Management
- NSS / YRC /RRC
- Legal Aspects of Business
- Organizational Behaviour
- Consumer Behaviour
- Customer Relationship Management
- Labour Legislations

In addition to these courses, the institution has Women Development Cell (WDC), counseling cell and antiragging cell to deal with the issues relevant to gender, human values and ethics. With an emphasis on the need of counseling the young minds, counseling cell is constituted to address the student's behavioral and academic issues. It strives to provide an admissible atmosphere to the students by organizing personality development camps to overcome the gender differences, conducting training programmes for the students and staff on counseling.

Anti-Ragging cell plans the activities like Anti-ragging campaign, formation of anti-ragging squad, Debate, Skits, Awareness talk by Government officials for curbing the ragging menace and making the students aware of human values. The cell addresses the complaints by the students, scrutinizes and approves the reports of the Anti-

### ragging Squad.

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

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

#### 5

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

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

## 74

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

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

## 345

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

## 1.4 - Feedback System

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

File Description	Documents
Provide the URL for stakeholders' feedback report	http://scteng.co.in/documents/IQAC/AQAR/AQ AR2020-2021/1.4.1.pdf
Upload the Action Taken Report of the feedback as recorded by the Governing Council / Syndicate / Board of Management	<u>View File</u>
Any additional information	<u>View File</u>

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

and action taken made available on the website

File Description	Documents
Provide URL for stakeholders' feedback report	http://scteng.co.in/documents/IQAC/AQAR/AQ AR2020-2021/1.4.2.pdf
Any additional information	<u>View File</u>

## **TEACHING-LEARNING AND EVALUATION**

## 2.1 - Student Enrollment and Profile

## 2.1.1 - Enrolment of Students

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

#### 200

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

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

#### 145

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

### 2.2 - Catering to Student Diversity

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

Our college adopts a process to identify slow and advanced learners among students. Advanced and slow learners are identified on as per their performance in Continuous Internal Assessment Examinations and End Semester Examinations. In order to ensure academic growth of the institution the Tutor - Ward system implemented to review the academic progress and the tutors motivate their wards to improve their performance.

#### Identification of Slow and Advanced learners:

To identify advanced and slow learners, we conduct "Student Induction Programme" at the admission into the college for the First year students.Student Induction Programme engages with the new students as soon as they come into the institution; before regular classes start. At the start of the induction, the incumbents learn about the Autonomous regulations and Curriculum, Universal Human Values, etc., and their mentor groups are formed. As early as possible, we identify slow and advanced learners amongst the students through class-room discussion, question and answer method, by considering their subject knowledge and previous year's performance.

From second year onwards, we consider their performance in the performance in Continuous Internal Assessment Examinations and End Semester Examinations. The academic performance of the students helps in identifying the slow and advanced learners.

Special Measures for Slow Learners:

- Academic and personal counseling are given to the slow learners by their subject in-charges, Class advisors and mentors.
- Subject wise Remedial classes are conducted for slow

learners and absentees to improve their academic performance.

- Re-Internal Assessment Examinations conducted for slow learners.
- Provision of simple notes and materials.

Special Measures for Advanced Learners:

- Provision of additional learning and reference material.
- Advanced learners are encouraged to enroll in various online courses.
- Motivated to participate and present papers in various Conferences, Webinars and Workshops conducted by various organizations.
- Students who secured Ranks in the End Semester Examinations are honored with Medals in the College Day to motivate their academic achievements.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	http://scteng.co.in/documents/IQAC/AQAR/AQ AR2020-2021/2.2.1.pdf

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

Year	Number of Students	Number of Teachers
01/06/2020	623	140

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

## 2.3 - Teaching- Learning Process

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

Experiential learning, participative learning and problem solving methodologies are well adopted by our college to ensure the holistic development of students. Besides, it focuses on the student-centric methods to develop latest skills, knowledge, attitude, values to shape students' career.

#### Experiential Learning:

Employability Enhancement Courses have been offered by the institution in the curriculum under Regulations 2019 to enrich the experiential learning to the students. In addition the institution imparts the following experiential learning practices to expand the creativity and intellectual levels of the students:

- Mini project and Project works are carried out by the students to showcase their innovative skills.
- Internship provided to the students to get Hands on Training with latest technologies.
- For real time exposures, students are encouraged to participate in National and International conferences, seminars (webinars) and workshops.
- Value Added Courses are given by the experts to develop their expertise in their domain.
- Guest Lectures are given by eminent experts from industry and academics to support learning process.

#### Participative Learning:

Participative Learning includes attending seminars, group discussion, quizzes, participating in project contexts, etc. This Participative Learning inculcates the students to become independent, improve leadership skills and augment the creativity.

- National Level Technical Symposiums are conducted through online mode.
- Students are encouraged to participate in National/ International conferences, Symposiums, Seminars and Workshops.
- Proficiency in soft and communication skills through lab sessions.
- Technical Quizzes are organized for student participation at intra or inter college level.
- Students develop their technical skills through Seminar
   Presentation by presenting papers.
- In order to acquire participative learning, the students are given exposure for Presenting and publishing of papers in conferences and journals.
- College organizes Team activities through NSS, NCC and YRC.
   Various activities such as Tree Plantation, Blood donation, Swatchh Bharat and Health awareness camp.

Problem-Solving Methodologies:

Faculty members encourage students to acquire and develop problemsolving skills. For this, each department organizes expert lectures on various topics, motivate students to join NPTEL courses, participate in various inter-college and intra-college technical activities and other competitions such as:

#### ? Regular Assignments based on problems

#### ? Mini Project development

#### ? Case studies Discussion

File Description	Documents
Upload any additional information	<u>View File</u>
Link for additional Information	http://scteng.co.in/documents/IQAC/AQAR/AQ AR2020-2021/2.3.1.pdf

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

Our College encourages, intensive use of ICT enabled tools including online resources for effective teaching and learning process. Our faculty members are using ICT enabled tools to enhance the quality of teaching-learning such as:

- General ICT tools are using by our faculty members such as Desktop and laptops, Projector, Digital cameras, Printer, Photocopier, tablets, Pen Drive, Ipads, Scanners, Microphones, interactive white board, DVDs and CDs.
- Google classroom is used to manage and post course related materials, Lab manuals, Records, Assignments, Answer scripts and evaluation etc.
- Virtual labs are used to conduct labs through simulation.
- For the effectiveness of teaching-learning process classes are taken with PPT
- Students' feedbacks are collected through Google forms.
- To teach mathematical subjects in online mode, teachers have used various online tools like- whiteboard in Microsoft teams, Jam board in Google meet, etc.
- Class Committee meetings, Seminar, Workshop and Symposium are organized through online mode.
- Students are counseled with the help of Google Meet applications.

- Wide range of e-resources like DELNET, Digital library, ejournals, e-books, CD and DVD etc., by using library.
- Smart board is used by the faculty members effectively.
- Our Faculty members were trained for effective usage of ICT Tools. Training was given by Dr.M.Sakthivel, Associate Professor & Head, Department of Computer Science and Engineering on 30.07.2020 through online.

File Description	Documents
Provide link for webpage describing ICT enabled tools including online resources for effective teaching and learning process	http://scteng.co.in/documents/IQAC/AQAR/AQ AR2020-2021/2.3.2.pdf
Upload any additional information	<u>View File</u>

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

## 2.3.3.1 - Number of mentors

#### 140

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

## 1. Academic Calendar:

The Dean (Academics) prepares the academic calendar every semester in advance. It consists of the list of working days, class committee meeting schedule, internal assessment test, model examination and Tentative End semester theory and practical examination dates, symposium, conferences, HoDs Meeting, IQAC meeting, holidays, festivals etc. Academic calendar provides the total effective working days available in a given semester. Then the time table Incharges prepares the time table according to the Academic Calendar which was approved by the Head of the Institution.

2. Teaching Plan:

Heads of the departments conduct meeting with their respective faculty members well in-advance of commencement of the semester course work, and allocate subjects. The subject in-charges concerned prepare Lecture plan for their respective subjects which are duly approved by the Head of the department. The number of hours in the teaching plan is framed depending on the credits of the course and made available to the students. This schedule is placed in the course file at the beginning of the semester. Effective implementation of the lesson and lecture schedules is monitored by the Head of the Department as well as academic auditors. Then the faculty members are asked to prepare unit notes and Lab manuals which are approved by Academic coordinator, HoD, Dean (Academics) and Principal. Due to pandemic situation, softcopies are posted in their respective Google Class room.

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

#### 140

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

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

16

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

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

## 700

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

## 2.5 - Evaluation Process and Reforms

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

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

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

1

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

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

The College has been continuously carrying out of reforms in its examination procedure through integration of IT in all the procedures and processes of the examination system. The reforms have also been implemented in the continuous internal assessments modes and components. Examination procedure has been completely automated using IT software.

Positive impact of reforms on the examination procedures and processes including IT integration and continuous internal assessment on the examination management system.

Examination Procedures and IT Integration:

- Adopting semester patterns of examination with continuous evaluation system for all the departments.
- Digital evaluation system has been successfully implemented for UG, PG examinations with the help of eNova Software.
- Inclusion of project, assignment, seminar presentation etc. as components of evaluation.

The positive impact of the examination management system in the College as Follows:

E-governance has been successfully implemented in the College during the Academic Year 2020-2021. Online entry of Students data, attendance and internal assessment marks help to reduce the errors and saves lot of time.

Due to pandemic situation, the End Semester Examination Nov/Dec 2020 had been conducted through proctored online mode in MCQ format by using AON software.

The End Semester Examination Apr/May 2021 had been conducted through proctored online mode in descriptive format by using eNova software.

Proctored Online End Semester Examination had been conducted successfully and the Proctors were appointed by the Controller of Examinations of our college

Question papers were uploaded in Google Classrooms for Continuous Internal Assessments and for End Semester Examinations by using Software. Before the commencement of examinations posting the Question papers 10 minutes prior which saves lot of stationery and physical movements and helps in avoiding leakage of question papers.

The students were instructed to upload the answer scripts within in one hour after the completion of the End semester Examinations and also asked to send the hard copy of the same to the college by next day.

Proctors were provided with login and password for the Monitoring and the External/Internal Examiners were also provided with login and password for digital evaluation.

Scheme of evaluation along with solutions are made available to the External/Internal examiners prior to the commencement of evaluation. Thus uniformity is maintained.

All the results of the examinations published through online.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional Information	http://scteng.co.in/documents/IQAC/AQAR/AQ AR2020-2021/2.5.3.pdf

#### 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

Sengunthar Engineering College follows the outcome-based education. The Program Outcomes (POs), Program Specific Outcomes (PSOs) are framed by each department with the consultation with all the faculty members and stakeholders.

Our college follows the Program Outcomes (POs) defined by National Board of Accreditation (NBA), New Delhi and are to be fulfilled by all the programs in higher education. The Course Outcomes (COs) for each subject is available in university syllabus and defined by concerned faculty member in consultation with HoD and Academic Coordinator. The POs, PSOs and COs are stated and displayed on websites communicated to all the faculty members, students and stakeholders.

File Description	Documents
Upload COs for all courses (exemplars from the Glossary)	<u>View File</u>
Upload any additional information	<u>View File</u>
Link for additional Information	http://scteng.co.in/documents/IQAC/AQAR/AQ AR2020-2021/2.6.1.pdf

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

The curriculum of the program is designed with core and elective courses by considering Vision, Mission, Program Educational Objectives, Program Outcomes, Program Specific Outcomes and requirement of stakeholder.

Course Outcomes (CO) are statements that are framed in the view of what the students are expected to attain at the end of the course. Each course has 1-5 outcomes depending on its significance which are mapped to the Program Outcomes and Program Specific Outcomes.

#### Attainment of COs of the Course:

To attain the course outcome for the course, faculty members use direct assessment tools and indirect assessment tools as assessment methods.

The direct assessment method includes Continuous Internal Assessment Tests and Co-Curricular Components consists of assignments, Quiz and Presentation, etc. Indirect attainment can be determined from the course exit survey. The course exit survey permits receiving feedback from students on individual COs.

Attainment of Program Outcomes and Program Specific Outcomes:

A correlation is established between COs and POs and COs and PSOs on the scale of 1 to 3, 1 being low correlation, 2 being moderate correlation and 3 being high correlation. If the course outcomes are attained, the POs correlated to these course outcomes are also attained.

The Assessment tools for Program Outcomes and Program Specific Outcomes are Direct and Indirect assessment methods. Direct assessment tools shows the knowledge and skills of the students based on their performance in seminars, assignments and examinations etc., which are based on the questions that relate to the specific Course Outcomes of the course. As Cos are mapped with POs and PSOs, the direct assessment tools used for COs can also be used for assessing POs and PSOs. Assessment of POs and PSOs can also be measured through indirect assessment tools. The course exit survey is taken at the end of the semester for each course.

The evaluation of attainment of POs and PSOs is obtained through the attainment of COs for all the courses.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional Information	http://scteng.co.in/documents/IQAC/AQAR/AQ AR2020-2021/2.6.2.pdf

## 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

#### 221

File Description	Documents
Upload list of Programmes and number of students appear for and passed in the final year examinations	<u>View File</u>
Upload any additional information	<u>View File</u>
Paste link for the annual report	http://scteng.co.in/documents/IQAC/AQAR/AQ AR2020-2021/2.6.3.pdf

## 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

http://scteng.co.in/documents/IQAC/AQAR/AQAR2020-2021/2.7.1.pdf

## **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

RESEARCH AND DEVELOPMENT CELL

#### RESEARCH POLICY

To promote the Research and Development in our institution a well drafted policy is scripted and followed. The research policy includes the promotion of research activity among the faculty members and involving the students to enhance the knowledge of recent developments and future hopes.

OBJECTIVES OF RESEARCH POLICY

The broad objective of the research policy is to provide guidelines for undertaking high impact and context specific applied research and to promote innovation and consultancy activities through development of Research Centre and Centre of excellence and also to motivate the students to take up the extension activities.

- To implement this policy the Institution has to make efforts to promote research activities in the department level, Staff member level and Student level.
- To increase the consultancy opportunities for faculties and students.
- To insist the students to take up extension activities by enriching their knowledge on serving the community and enhancing the social awareness.
- To establish an Advisory Committee and Research Ethics committee in the institution to enhance research activities.
- To create the platform for the faculty members and students to promote research activities.
- To encourage the faculty members for R&D activities in the area of their specialization in a group.
- To motivate staff members and students to publish technical papers for publishing in National International Conferences/Journals.
- To initiate, develop and coordinate research in newly emerging areas of science and engineering which includes all multi-disciplinary fields
- To assist the faculty members to take part in R&D activities like publishing journal, inculcating research innovative ideas for their professional growth
- To facilitate by motivating the faculty members in getting

research grants from National and International agencies by submitting research projects.

- To inculcate relationships with reputed industries and agencies to know the requirement and expectation of industries.
- To provide seed money for the faculty members with the approval of the Governing body or the Management peer team.
- To introduce new value-added courses, training programs, workshops that promote students towards innovation and entrepreneurship activities.
- To activate Incubation centres and see that the products so emanate march ahead towards commercialization.
- To create an ecosystem for innovations, foster & encourage entrepreneurship including incubation center, and other initiatives for creation and transfer of knowledge
- To motivate the faculty members to share their knowledge and expertise for betterment of society and promote consultancy and project works in industry and other sectors
- To facilitate community-oriented research initiatives and transfer the research findings for the social innovation and economic development of the community/society
- To award the faculty members and students and concerned departments who are all actively pursuing research works and consultancy works
- To arouse the social consciousness of the students by providing them opportunities to work with people.
- To develop an awareness and knowledge of social realities to have concern for the well being of the community and engage in creative and constructive social action.
- To identify the needs and problems of the community through student's extension activities.
- To identify and establish Industry-Institute Interaction through MOUs for long relationships with the national and international academic institutions of higher learning and research institutions for widening the scope of research options and funding opportunities for the faculties and students

#### RESEARCH PROMOTION POLICY

The institute provides necessary facilities and a promising environment to promote research, consultancy, innovation and intellectual capital.

• All the faculty members are encouraged to conduct research in the focused as well as interdisciplinary areas of

research

- Full administrative support is provided to all faculty members students for filling of patents/other IPR related activities
- The SEED money for internal projects is provided by the institution to encourage initial research related activities for all potential faculties
- Faculty members with eligible qualification shall register for Ph.D. and are permitted to pursue Ph.D. under part time mode in the Anna University or any other reputed University
- Faculty member with Ph.D. qualification shall publish minimum one SCI paper per year and Faculty with Master's Degree qualification shall publish a minimum of two Scopus indexed papers per year
- The UG and PG projects are research focused and could be published either in the SCI/SCIE/SSCI or Scopus indexed journals
- The Institution supports to organize the high-level topical conferences/workshops/seminars for enhancing research activities.
- Annual awards to the faculty members for the excellence in research grants, publications, outside world interaction is provided by the Institution

#### Policy For Research AndConsultancy Project

The Institute gives reward to faculty members for the Research and Consultancy Project works carried out in the respective year. This practice is introduced by the Management to impart research culture and to motivate faculty towards identifying new innovations.

#### Terms & Conditions:

- The consultancy work will be carried out under the guidance of the Head of the institution and Research and development cell.
- Faculty should motivate the students towards participate in industrial consultancy projects.

#### **RESEARCH COMMITTEE**

S. No.

Category

#### Name

Designation

1

Chairperson

Dr.C.Venkatesh

Principal

```
2
```

Coordinator of the IQAC

Dr.M.Selvakumar

Assoc. Prof. & HOD/MECH

```
3
```

Deans

Dr.B.Sujatha

Dean (Academics)

Dr.P.Rameshkumar

Dean (Research & Development)

Dr.K.L.Palanisamy

Dean (Student Affairs)

#### 4

Internal Members /HoDs

Mrs.N.Kiruthika

Asst. Prof. & HOD (i/c)/CIVIL

Dr.M.Sakthivel

Assoc. Prof. & HOD/CSE

Dr.C.Aarthi

Assoc. Prof. & HOD/ECE

Dr.K.Umadevi

Professor & HOD/EEE

CODE OF ETHICS IN ACADEMIC RESEARCH

OBJECTIVE

- To provide Good Practice in Academic Research
- To give Academic Freedom, Integrity and Responsibility
- To authenticate Institutional Responsibilities by providing training
- To illustrate Publication Practice and Authorship
- To explore Research Misconduct and Identifying Levels

The ethical committee is responsible for creating and promoting a transparent academic environment conducive to the application of research works.

S. No.

Category

Name

Designation

```
1
```

Chairperson

Dr.C.Venkatesh

Principal

#### 2

Coordinator of the IQAC

Dr.M.Selvakumar

```
Assoc. Prof. & HOD/MECH
```

```
3
```

#### Dean

Dr.P.Rameshkumar

Dean (Research & Development)

#### 4

Internal Members

Mr.M.SoundarRajan

Asst. Prof./CIVIL

Dr.G.Jayamurugan

Assoc. Prof./CSE

Mr.A.Rahul

Asst. Prof./ECE

Mrs.T.Gohila

Assoc. Prof./EEE

Mr.N.Thiru Senthil Adhiban

Asst. Prof./ MECH

#### Dr.K.Vignesh

Asst. Prof./PHY

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	http://scteng.co.in/documents/IQAC/AQAR/AQ AR2020-2021/3.1.1.pdf
Any additional information	<u>View File</u>

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

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

#### 0.61

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

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

2

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

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

#### 0

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

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

#### 0

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional Information	http://scteng.co.in/documents/IQAC/AQAR/AQ AR2020-2021/3.2.2.pdf
List of research projects during the year	<u>View File</u>

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

# 5

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

5

File Description	Documents
Supporting document from Funding Agencies	<u>View File</u>
Paste link to funding agencies' website	http://scteng.co.in/documents/IQAC/AQAR/AQ AR2020-2021/3.2.4.pdf
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.

Sengunthar Engineering college has a well-established and active Research and Development Cell, with members drawn from different departments. The Cell encourages students and faculty members to carry out innovative research aimed at patent registrations and arrange lectures / workshops on IPR. Our college has encouraged student level, faculty members level and department level programs to enhance research activities. The Research and Development Cell constituted Research Committee and Ethics Committee to enhance the research culture in the Institution

The Institution has well-equipped laboratories to cater to the needs of students and to nurture them towards research and developmental activities. The R & D Cell organizes review meeting to ensure that faculty members submit research proposals to various government organizations for getting sponsored projects. The research committees under the R&D cell scrutinize and select projects from all departments by awarding SEED money to promote projects at the entrylevel. The Ethics Committee reviews all publications of conference and journal for plagiarism. Various consultancy activities are promoted by the institution for promising future of the students. Students are encouraged to submit the new innovative projects and better projects are selected and funded by the agencies.

Our faculty members have published several research papers in UGC/ Web of Science indexed journals in the past years. The Institution has an ecosystem for innovations including Entrepreneur Development Cell and Incubation Cell for helping successful engineering graduates to float startup ventures and technology transfer. This Center aims at providing training to the interested graduates in our college, rural youth entrepreneurs and women selfhelp groups. The innovative projects of the students have led to Technology Transfer to government and corporate sectors.IIC which works with mentor mentee concept enhances the innovative idea culture in the Institution by conducting innovative contests to develop the research work.The Entrepreneur Development cell guides the students to towards employability growth by conducting several motivational programs and employability training in various methods.

Several seminars and workshops, innovative contests are being organized for students and faculty members from various departments every year to inculcate their interest towards the research activities.

Research Committee

S. No.

Category

Name

Designation

```
1
```

Chairperson

Dr.C.Venkatesh

Principal

#### 2

Coordinator of the IQAC

Dr.M.Selvakumar

Assoc. Prof. & HOD/MECH

3

Deans

Dr.B.Sujatha

Dean (Academics)

Dr.P.Rameshkumar

Dean (Research & Development)

Dr.K.L.Palanisamy

Dean (Student Affairs)

### 4

Internal Members /HoDs

Mrs.N.Kiruthika

Asst. Prof. & HOD (i/c)/CIVIL

Dr.M.Sakthivel

Assoc. Prof. & HOD/CSE

Dr.C.Aarthi

Assoc. Prof. & HOD/ECE

Dr.K.Umadevi

Professor & HOD/EEE

Ethics Committee

S. No.

Category

Name

Designation

1

Chairperson

```
Dr.C.Venkatesh
```

```
Principal
```

```
2
```

Coordinator of the IQAC

Dr.M.Selvakumar

Assoc. Prof. & HOD/MECH

```
3
```

Dean

Dr.P.Rameshkumar

Dean (Research & Development)

4

Internal Members

Mr.M.Soundar Rajan

Asst. Prof./CIVIL

Dr.G.Jayamurugan

Assoc. Prof./CSE

Mr.A.Rahul

Asst. Prof./ECE

Mrs.T.Gohila

Assoc. Prof./EEE

Mr.N.Thiru Senthil Adhiban

Asst. Prof./ MECH

Dr.K.Vignesh

#### Asst. Prof./PHY

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	http://scteng.co.in/documents/IQAC/AQAR/AQ AR2020-2021/3.3.1.pdf

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

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

# **3.4 - Research Publications and Awards**

3.4.1 - The Institution ensures	A.	<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 Research					
Ethics in the research methodology course					
work Plagiarism check through					
authenticated software					

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

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

# 3.4.2.1 - Number of PhD students registered during the year

### 10

File Description	Documents
URL to the research page on HEI website	http://scteng.co.in/documents/IQAC/AQAR/AQ AR2020-2021/3.4.2.pdf
List of PhD scholars and details like name of the guide, title of thesis, and year of registration	<u>View File</u>
Any additional information	<u>View File</u>

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

### 78

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

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

### 45

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	http://scteng.co.in/documents/IQAC/AQAR/AQ AR2020-2021/3.4.4.pdf

# 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

# 119

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

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

# 3.4.6.1 - h-index of Scopus during the year

### 12

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

### 3.5 - Consultancy

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

### 0

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

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

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	<u>View File</u>
List of facilities and staff available for undertaking consultancy	<u>View File</u>
Any additional information	<u>View File</u>

#### 3.6 - Extension Activities

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

The extension activities in our college make the students to understand the community in which they will work and identify the needs and problems of community and involve them in problem solving. Extension Activities aims at enabling our students/volunteers to develop social responsibility and learning by doing. Service attitude is essential for any professional to flourish in his/her job. Our extension activities have multiple dimensions such as National Service Scheme, National Cadet Corps, Youth Red Cross, Red Ribbon Club, etc. The professional as well as life skill development of engineering graduates is balanced through extension activities. NSS activity makes the students confident, develop leadership skills, and gain knowledge about different people from different walks of life. Students also learn other skills that help them lead a better life in various situations. NSS offers a wonderful opportunity to use one's spare time to empathize and help the poor and the under privileged fellow countrymen living in slums and villages. It creates the volunteers with an opportunity to train themselves as the future leaders and decision makers of the country. It provides training to equip the volunteers with the minimum necessary skills to carry out the programme.

The NSS units of the institution consist of 200 (unit I -100 +Unit II-100) socially sensitive students with a deep sense of service participating in the activities of club with verve. With the unswerving support of the Management, the NSS Units further

enhances the social spirit through Regular Activities and Special Camp. In addition, many tasks are carried out along with Human Resource Development, Govt. of India scheme Unnat Bharat Abhiyan (UBA). Students used to go to the nearby villages to involve themselves in the field work thereby knowing the real conditions of the villagers.

Our college is committed towards social and national responsibilities; bearing this in mind we have raised the NCC Air Force in the year 2019 under 5 TN Air Sqn Tech NCC Salem on 18.09.2019 with 51 cadets to commit themselves in various training activities and exposure to the wide range of activities like Social Services like Swach Bharat Abhiyan, Azad Ka Amrit Mahotsav and programs conducted by Ministry of India and adventurous training like Mountaineering Trekking, Weapon Training, Vayu Sainik Camp, Air Force Attachment Camp and make them to take part in Republic Day Camp one of the dream moment of every Cadets life.Our college is equipped with the infrastructure facility for FiringRange withwell-structured Parade Grounds. The NCC programme provides ample opportunities to the cadets by take part in firing competition, drill practices, personality development camps like Basic leadership Camp and Annual leadership Camp, Ek Bharat shreshthabharat Camp which makes them explore about the different cultures and their diversity, comradeship, character, sportsmanship and voluntary service programmes which makes them to get in Government sectors easily with the motto of Unity and Discipline for serving the nation.

We believe that an individual will come to possess an adoring personality only by involving himself / herself in activities like NCC, NSS etc.

The RRC of our college is encouraged to learn about safe and healthy lifestyles. The RRC promotes access to information on healthy life and voluntary blood donation. They create and provide opportunity to the zeal of volunteerism among youth to contribute towards the control and prevention of most hazard deceases

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	http://scteng.co.in/documents/IQAC/AQAR/AQ AR2020-2021/3.6.1.pdf

# **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

0

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

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

6

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

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

### 87

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

# 3.7 - Collaboration

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

72

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

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

#### 4

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

### INFRASTRUCTURE AND LEARNING RESOURCES

### **4.1 - Physical Facilities**

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

Academic and non-academic infrastructure is properly categorized

Academic infrastructure:

The College encompasses a well maintained lush green campus spread over 60 acres of land ensuring adequate availability and optimal utilization of physical infrastructure for teaching learning activities.

The college has enough classrooms with natural light, podiums, seating facilities, a teacher's chair and table, and bulletin boards in all disciplines. Blackboards and bulletin boards are provided in all classes. Dustbins are placed in all classrooms.Several Xerox machines are located around the institution.

Seminar halls are regularly used for conducting national / international seminars at the college.The students are promoted for active involvement in paper presentations, group discussions, etc. The College has multiple seminar halls which are equipped with an LCD projector, an audio system, a podium, and seating for 300 people, are often utilized for various events. All the laboratories are established as per Anna University norms.Laboratories are developed specifically to fulfill the needs of students from various departments. There are certified demonstrators and a lab technician in each lab. There are wellequipped laboratories with all contemporary instruments, as well as a set of Do's and Don'ts posted within the lab.Our department laboratories are utilized by students and faculty members for learning purposes, project work, research purposes and entrepreneurship. The timetable committee, by properly allocating rooms and laboratories so that there are no overlaps.

Non Academic infrastructure:

We offer a spacious playground for volleyball, badminton, basketball, and cricket practices, as well as a well-equipped gym with all of the necessary equipment for indoor activities.Our student's sports achievement details are also attached.Our institution has an emergency vehicle that is used to transport students to their hospital if they get ill after receiving early treatment such as rest.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	http://scteng.co.in/documents/IQAC/AQAR/AQ AR2020-2021/4.1.1.pdf

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

The Institute, with its Core Courses and the continuous evaluation scheme, integrates sports and extra-curricular activities as essential components. This is done not only for participation but also for assessment of students.

It has adequate facilities for sports, games and cultural activities. The total area of sports and games fields is 12 acres. Our College holds well exposed teams in Football, Basket ball, Cricket, Kabaddi, Ball Badminton, Shuttle badminton, Table Tennis, Boxing, Hockey, Volleyball, Take-Won-Do, Judo and Athletics.

All faculties have well-equipped assembly halls for organizing annual functions and cultural events. Facilities for outdoor and indoor sports and games that include badminton, volley ball, basket ball, carom, table tennis and chess, gymnasium and cultural activities also exist in the Girls and Boys Hostels. Our student's sports achievement details are also attached.

The institute encourages students to participate in sports & games outside the campus. Transport is provided to students to participate in events outside the campus. The constant support from the management towards sports and games considerably enhances the health of the students and relieving the tension. In our effort we won number of tournaments.

Intra-faculty and inter-faculty games and sports competitions are organized regularly every year for students. Students are specially trained for participation in Zonal and Inter-Zonal National Youth Festivals competitions organized by the Association of Indian Universities, the National Youth Parliament competition and other cultural and sports events outside the campus.

Some of the faculty members serve as instructors at the Day albagh Yoga Centre. Special classes on self-defense are organized specially for female students.

National Independence Day and Republic Day are celebrated in the Institute by unfurling the national flag followed by a guard of honor of the Chief Guest by NCC students, an impressive march past of students of all faculties on the beats of the students' band and organization of athletic events. The best marching contingent is judged by a panel of army veterans.

Students present cultural programmes on the Convocation Day and in National and International Conferences organized by the Institute. Our institution has an emergency vehicle that is used to transport students to their hospital if they get ill after receiving early treatment such as rest.

File Description	Documents
Geotagged pictures	<u>View File</u>
Upload any additional information	<u>View File</u>
Paste link for additional information	http://scteng.co.in/documents/IQAC/AQAR/AQ AR2020-2021/4.1.2.pdf

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

#### 12

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)**

### 259.95873

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

### 4.2 - Library as a Learning Resource

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

Sengunthar engineering college was established in 2001 and it is an autonomous engineering college affiliated by Anna University, Chennai. The college has an separate excellent integrated library surrounded by an area of 1526.954 sq.ft with two floors. The library is the repository of knowledge and information, as well as the nerve centre of the college's teaching and learning operations.

In Ground floor, there are separate reading hall with Journals and magazine section, reprography section and digital library section. In First floor, there are department wise text books and reference books (UG & PG) with vast reading hall and Reference section. We have a central library at our campus, as well as a group discussion area with capacity for 25 people.

The Second floor has an separate Group Discussion hall, IIT Remote Centre Bombay, General aptitude books, Book Bank Books and Back Volumes of the journals. The college library contains a sufficient amount of volumes to cover all of the college's subjects.

Further our library includes more than 37904 books, 108 journals and 17 magazines, 459 CD's , 1287 back volumes, 1230 projects and NPTEL 6TB hardware and also online access in digital library.

Moreover, it has an integrated library Management software, Campes iLIb, Software 6.0.8. version established in the year 2010. The usage of the above mentioned software are Gate entry, data entry, Book issue and return, renewal of the books, journals entries etc. The automated system enables book purchase order, receiving and Accessing , cataloguing in the form of Dewey Decimal Classification. OPAC (Online Public Access Catalogue) service is provided for the users to search the collection of the books, titles, authors, publishers and particular editions, etc. The users have to swipe the ID card while entering into the library and the Circulation of books issue and return, Stock verification, etc are maintaining by barcode technology. Departmental libraries are maintained by some departments. Books on general themes are also available for students' further growth. Computer lab with internet access and a printer is provided. Students are given a library card to use at their leisure.

The library offers a property counter where students may leave their bags and valuables.

Library usage by students is tracked both digitally and manually.

Uses of Digital Library:

1. The digital library having 60 computers with remote access facility exclusively for students.

2. It has various e-books, IEEE journals, DELNET, NPTEL audios and videos, previous year question bank and various online materials.

3. It provides the service of photocopy, scanning , Printing, etc for the students.

4. The central library is completely covered under the Wi-Fi network.

5.All Faculty members and students of our institution are registered in NDLI.

6. Book bank facilities for both UG & PG are provided for minority

#### students.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	http://scteng.co.in/documents/IQAC/AQAR/AQ AR2020-2021/4.2.1.pdf

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

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

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

# 1.74886

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

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

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

25

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

### 4.3 - IT Infrastructure

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

Sengunthar Engineering College maintains certain policies with regard to the use and security of its computer systems, networks, and information resources. All users of these facilities, including technology developers, end users, and resource administrators, are expected to be familiar with these policies and the consequences of violation.

The college has a comprehensive IT infrastructure, service, security, and administration system that is available to all departments.There is a 50mbps backbone connecting all PCs to the LAN. Internet access is available at all PCs.IT infrastructure is upgraded on a need-to- basis.Efforts are made to maintain previously purchased computers and other equipment.

The Information Technology Policy Committee, guides, directs, and approves the establishment and implementation of policies, guidelines, and standards pertaining to the use of IT within Sengunthar Engineering College.

The university is upgrading its IT infrastructure, and software for office automation, admissions, library, examinations, and other purposes is being implemented. Students are encouraged to use ICT tools to provide seminar speeches. Creation of committee regarding IT policy is under progress. The institute has always given priority for up-gradation of IT facilities. Regular updating is done in facilities at institute level as well as department level. The description of the same is provided below.

Wi-Fi has been installed around the campus to allow students and faculty members to easily access the internet.Due to rapid technological advancements, computers are upgraded on an almost yearly basis.On working days, all computer laboratories are open from 9 a.m. to 5 p.m., with the ability to extend the hours if necessary. If equipment is required, we submit the request six months in advance. Remote Centre for IIT, Bombay:The audio-visual setup enables the institute to often arrange workshops conducted by IITs via video conferencing. The equipment ofaudio visualsetup was upgraded in 2018.

Upgrading Policy:Computers in the institute are upgraded with new Hard Drive and RAM with a size of 4GB and 8GB.

Identity: System Identity is given in the form of IP Addresses and unique number is assigned to each and every computer in laboratories and faculty rooms.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	http://scteng.co.in/documents/IQAC/AQAR/AQ AR2020-2021/4.3.1.pdf

# 4.3.2 - Student - Computer ratio

Number of Students		Number of Computers
2010		804
File Description	Documents	
Upload any additional information		<u>View File</u>

# 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	<u>View File</u>

4.3.4 - Institution has facilities for e-content A. All four 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	<u>View File</u>
Paste link for additional information	http://scteng.co.in/documents/IQAC/AQAR/AQ AR2020-2021/4.3.4.pdf
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)

#### 255.82377

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

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

The institute has well defined system of maintenance of its academic, physical and support facilities like laboratory, library, sports, computers, class rooms etc. The maintenance committee headed by The Principal and convened Administrative officer who intern monitor the work of supervisor in next level. Maintenance supervisor and his team are involved in the maintenance of overall infrastructure facilities. This team looks after regular maintenance and repair of furniture, masonry, plaster, painting, plumbing, housekeeping, gardening, transport, RO plant, telecom and IT services.

Maintenance usually comes under two types i.e. schedule maintenance and preventive maintenance. Regular maintenance of students and faculty are maintained by log book format.Formation of maintenance committee also in progress. A team of professional personnel, including carpenters, electricians, masons, construction workers, plumbers, and painters, maintains the infrastructure. This team is usually on site or easily available on call. The phone numbers are posted in the office with the chief peon, who hears complaints and oversees the maintenance work. Calibration and precise measurements for equipment/instruments are performed on a near-daily basis. Staff members are given responsibilities to help the lab assistants ensure that the instruments are properly maintained and calibrated on a daily basis.

- Regular cleaning of class rooms, floor, laboratories, library and rest rooms are done by housekeeping staff.
- Adequate staffs are employed to meticulously maintain cleanliness of infrastructure to provide a congenial learning environment.
- Dust bins are placed in every class room.
- The campus maintenance is monitored through surveillance Cameras the green cover of the campus is well maintained.
- The college has good team of electricians & plumbers who maintain RO system, electrical and water facilities in college and hostel.
- The college is power backup with generator.

#### Maintenance of Laboratory equipment

Preventive maintenance and breakdown maintenance procedures are followed for all laboratories. The laboratory/workshop equipment and machinery are maintained by well-trained technical staff. Periodical check-up equipment is carried out as per laboratory schedule.

The minor repair/service will be done by the technical staff with lab in-charges. The major service requests will be forwarded to Principal through Head of the department. The maintenance department, find for suitable service personal for rectification. Annually stock verification of all laboratories and other facilities are carried out. The computer laboratories are supported with power backup system UPS. A weekly status of hardware and software are maintained in register.

#### Library maintenance

Entry and exit register is maintained to ensure effective utilization of library.

The requirement of the books are collected by librarian from department as per the demand fromstudents and faculty.

The books are cleaned at periodical intervals to avoid infections and dust.

### Electrical maintenance

The generator, lighting, electrical, air conditioners, solar panel, and RO system maintenance is carried out by in-house electricians.

#### Transport maintenance:

The college has a fleet of buses which is provided to students and staff.Buses are regularly cleaned. Vehicles are periodically greased for smooth running.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	http://scteng.co.in/documents/IQAC/AQAR/AQ AR2020-2021/4.4.2.pdf

### 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

#### 572

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

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

585

A. All of the above

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

5.1.3 - The following Capacity Development and Skill Enhancement activities are organised for improving students' capabilities Soft Skills Language and Communication Skills Life Skills (Yoga, Physical fitness, Health and Hygiene) Awareness of Trends in Technology

File Description	Documents
Link to Institutional website	
	http://scteng.co.in/documents/IQAC/AQAR/AQ AR2020-2021/5.1.3.pdf
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

# 497

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'

### A. All of the above

# grievances Timely redressal of grievances through appropriate committees

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

### **5.2 - Student Progression**

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

### 156

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

# 5.2.2 - Number of outgoing students progressing to higher education

# 8

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

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

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

0

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

# 5.3 - Student Participation and Activities

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

5

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

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

- College creates a platform for the active participation of the students in the various academic administrative bodies.
- This empowers the students in gaining various skills apart from leadership and Headship qualities. Out of 43 Committees/Cells/Groups etc in the institution, students are actively involved as a key representative in 20 Cells, like Women Empowerment Cell, Green Club, Entrepreneurship Development Cell, Creativity and Innovation Cell, Toastmasters Club, Center for Excellence, Texas Innovation Lab, Tamil Mandram, Povrnami Kavirangam, Womens Forum, Blood Donors Club, NSS, YRC, RRC, Eco Club, Class Committee, Activity Based Learning Cell etc.
- Each Cell has a separate mode of selection and function based on the need and importance of the Cell/Committee/Forum.

Few key activities of the Students in the Committees are:

- The student members bring forward the views and suggestions of the entire class with respect to the faculty, subjects, syllabus and other things related to the class.
- The composition of student members is of two topper, two

average and two slow learner (the one who has more integrity with other students) of each section are nominated as class representatives, for all the sections from First Year to Final Year.

- The Class Committee helps students to share ideas, interests, and concerns with lecturers and principal. They often also help raise funds for wide activities, including social events, community projects, helping people in need and college reform.
- Various programs like paper presentations, workshops and seminars are organized by these bodies every year.
- Apart from that we had formed Library committee for improving the reading habits of the students, Cultural Committee for students Extra Curricular Skill Development, for Discipline, Anti Ragging Committee, for Physical Fitness, Sports Committee.
- The funding for various activities of the internal college bodies is provided by the College Management.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	http://scteng.co.in/documents/IQAC/AQAR/AQ AR2020-2021/5.3.2.pdf

# 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	<u>View File</u>

# 5.4 - Alumni Engagement

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

• Sengunthar Engineering College has a registered Alumni Association for building strong bond between alumni and present students. The alumni give support to the students through interaction, financial funding, guidance and placement. This was registered under under theTamilnaduSocieties & RegistrationAct1975 (CERTIFICATE OF REGISTRATION OF SOCIETIES : Sl.No.: 119/2010). The mission of the Alumni Association is to foster a mutually beneficial relationship between the Institute and its alumni.

- Yearly a General Body Meeting is organized during the Graduation Day and nominates the Officer Bearers for the Association. Apart from this a regular visit by the Alumni for discussion with the Students about the present industrial scenario and also utilize them for the Placement opportunities of the students.
- To encourage and promote close relations between the Institution and its alumni and among the alumni themselves.
- To promote and encourage friendly relations between all members of the alumni body, an interest in the affairs and well-being of the Institution.
- To provide and disseminate information regarding their Alma Matter, its graduates, Faculties and students, to the alumni.
- To initiate and develop programs for the benefit of the alumni.
- To assist and supporting the efforts of the Institution in obtaining funds for development.
- To serve as a forum through which alumni may support and advance the pursuit of academic excellence at the Institution.
- To guide and assist alumni who have recently completed their courses to obtain employment and engage in productive pursuits useful to society.
- To organize and co-ordinate reunion activities of the Alumni and let the Alumni acknowledge their gratitude to their Alma Matter.
- To collect, publish and distribute such information as may be useful to the alumni and their Alma Mater.
- Alumni have donated funds to assist the Poor & Merit students of the Institution.
- Alumni are included as members in the Board of studies of all departments. They are invited for meetings at the college and they interact with their teachers and express their suggestions on curriculum revision.
- A Few Alumni gave Guest lecturers to the existing students on some contemporary technological developments and career

### guiding focuses.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional Information	http://scteng.co.in/documents/IQAC/AQAR/AQ AR2020-2021/5.4.1.pdf

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

E. <2 Lakhs

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

# GOVERNANCE, LEADERSHIP AND MANAGEMENT

### 6.1 - Institutional Vision and Leadership

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

Our Governing body is more reflective and the main focus is on the vision and mission of the Institution.

### Vision:

To produce talented engineers and technicians to meet the challenge of the modern world to train the young People to understand human values.

### Mission:

To offer professional education and bring out the hidden talents from the rural based students as our nation depends on rural mass.

To ensure that the Institution is efficiently managed and administered the college follows a time tested and successfulas well as a competent secretarial constitution comprising of:

- The Management
- Principal
- Dean(s)
- Director-CR
- Heads of the Department

#### • Faculty Members

The management holds the Executive Committee Meeting with the Principal to review the academic administration, research and development, and/or any other agenda planned for the growth of the institution. Major policy decisions are taken in these meetings.

The Principal conducts regular monthly meetings with all the Heads of the departments and Dean(s) regarding academic activities, following up on the academic calendar, students' progress, placement and training, research and extension activities, industry interaction, consultancy assignments, alumni interaction etc.

The Principal ensures that in all these reviews the decisions taken in the Executive Committee Meetings are effectively enforced. The Principal meet the members of the faculty of every department once in a semester to convey the management's viewpoint and also to motivate the faculty members to continue putting in efforts to deliver improved contributions thus ensuring overall good performance of the Institution.

The Heads of the departments regularly conduct departmental meetings with all the members of their faculty to ensure that the various committees that have been constituted are functioning effectively to ensure maintenance as well as continuous improvement in the quality of the teaching-learning process.

The Institution focuses on the following areas of Governance.

#### Teaching and Learning:

All the faculties of the institution are encouraged to train in the modern and innovative methods of teaching and motivated to attend various programmes related to pedagogy. The most commonly used teaching and learning methods at the institution are lecture, PowerPoint Presentation, Seminar, demonstration, Hands on practice, peer teaching, team teaching, internship, projects, surveys, industrial visits, group discussion, quiz, games and role play.

#### Examination and Evaluation:

The Office of the Controller of Examinations executed for processing the Examinations and Evaluation process. Continuous Internal Assessments (Three Internal Assessments) and End Semester (One End Semester) Examinations are conducted to evaluate the progress of the students.

End semester Examinations for theory, practical and Lab embedded theory courses The Question paper is being prepared by both External and Internal faculty. Evaluation of answer scripts is done by both external and internal faculty members in the ratio of 2:1. Further process includes conduct of examinations, publishing results, revaluation/photocopy of all UG and PG programmes in both semesters Odd and Even.

Research and Development:

The college has a separate Research and Development Cell which takes up the activities related to Research and Innovation. The committee is headed by the Dean-RD. All the faculty members have been encouraged to apply Research Proposals to various funding agencies like AICTE, DST, UGC, CSIR, ICSSR, etc.

Planning and Development: The college has a separate Planning and Development Cell which take up the initiatives and activities related to renovation of building and other infrastructure of the institution. The committee is headed by the Dean-P&D.

Library, ICT and Physical Infrastructure / Instrumentation: The college boast a well-stocked and semi- automated central library with college and Department wise division to ensure easy, quick and efficient access to desired data. NPTEL (National Programme on Technology Enhanced Learning) web courses and video courses are being used by staff and students to enhance their skills. The college is an institutional member of DELNET for sharing resources with other libraries to enhance teaching - learning process.

Human Resource Management: The management assesses adequate human power requirements. Recruitment and Selection of the faculty members are based on the guidelines provided by AICTE, New Delhi and Anna University, Chennai. Regular feedback and suggestions from the faculty members are obtained for the development of Human Resource Management.

Industry Interaction / Collaboration: Various MoU's are signed for the academic development and students' professional growth. Industry Interaction is integrated for all UG and PG Programmes. Membership with EEDISSIA (Erode District Small Industries Association), CII (Confederation of Indian Industry) and MoUs signed with leading companies are beneficial to the students'

#### community.

With exchange of expertise and a proper monitoring system is evaluated to measure through IIPC. Guest lecturers are being conducted by the Industrial Experts. The Effective function of Entrepreneurship Development Cell is organizing various Programmes and Exhibitions.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional Information	http://scteng.co.in/documents/IQAC/AQAR/AQ AR2020-2021/6.1.1.pdf

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

#### Motivation

All the Head of the Departments has the responsibility of motivation and mobilization. Staff Members and Students are motivated to give their opinion, suggestion and feedback in all aspects of administration and academics.

#### Mechanism

The decision-making process in SEC is achieved by following participative mechanisms by involving various members through the following statutory bodies: Governing Body - College management -Academic Council - Administrative Council - Department HoDs and Coordinators - Departmental Board of Studies.

#### Outcomes

Decentralization permits the students and faculties to be greater responsible, responsive, touchy and proactive to work out their personal discretion for making plans and execution in a participatory and democratic environment.

#### Future Plans

SEC is working to set the benchmark for every activity to ensure quality administration in future through intensive efforts of all stakeholders. Decentralization:

The Institute supports a trend of decentralized governance systems with proper well defined inter-relationships. The management of the institute has decentralized functioning through governing body (GB), Secretary and Correspondent, Principal, Deans and HODs.

Regular meetings of these committees are held for the effective and smooth functioning of the institute. Administrative structure under which all the activities of the institute are carried out.

Institute level - The management of the institute is directed by the Governing Body, whose members are appointed in accordance with the guidelines provided by the Anna University, Chennai and AICTE.

All the main decisions related to the institute are taken by the Principal in consultations with the Head of departments. Principal is the academic and administrative head of the Institute and the Member of the Governing Body. Some financial power is given to the principal for the development of the institution.

Department level - The Department Heads are responsible for looking at day-to-day administration of the department and report to the Principal. In addition, any institute staff member can give suggestions and ideas for improvement. Students also participate through different formal and informal feedback mechanisms. Management is approachable and accepts all suggestions.

Participative management: The institute always promotes the culture of participative management by involving staff and students in various activities. All decisions of the institution are governed by management. The students and faculties are allowed to express themselves for any suggestions to improve the excellence in any aspect of the Institute. We have been given opportunities to non-academic staff members whenever the need arises.

The Principal, Dean Academics, HODs and staff members are involved to defining the policies and procedures, making guidelines and rules/regulations pertaining to admission, placement, discipline, grievance, counseling, training & development, and library services etc., Staff members are also involved in deciding academic activities and examinations to be conducted in institute.

The faculty members participate in sharing the knowledge by discussing the latest trends/technology during faculty meetings.

Some Staff members are involved in preparation of the annual budget of the department and institute.

The Principal of the institution is a member of the GB. The GB gives suggestions and monitors the procurement, introduction of new programs and welfare activities. All the staff members actively participate in implementing the policies, procedures, and framework designed by the management in order to maintain and achieve the quality standards and achieve the vision and mission of the institution. Non -Teaching and office staff is involved in executing day to day support services from students and faculties.

Case study : -Academic Monitoring Committee (AMC).

Role: Academic Monitoring Committee (AMC) is (college level) responsible for supervising, modulating and executing the various academic actions & guidelines. It is purposely formed for continuous & reliable conduction of academic work all through the institute.

Committee Member Hierarchy: AMC is en route by Principal and monitored by Dean - Academic of the institute. Other members of the committee are Head of Departments, Department wise academic Coordinators and Subject staff, class advisors, exam coordinators and supporting staff. Activities conducted by AMC: Teaching learning process monitors by AMC. It prepares the academic calendar of the institute which is a mirror image of University's academic calendar that includes curricular, co-curricular and extracurricular activities. The Academic Calendar is intensively planned and prepared in advance by the Dean of Academics and ensures the proper implementation of the academic calendar. The Dean of Academics is responsible for confirmation and observation of academic activities.

Internal Assessment test and result analysis meeting is conducted. Extra care is given for poor/weak students.

Result: The AMC conducts the meeting periodically for the discussion of issues and challenges for the development aspects of the institute. through proper channels i.e. through Academic coordinators, student feedback system and through other various committee meetings. Institute encourages teachers, students, parents, corporate resource persons, employers, alumni, staff, class coordinators and class representatives to share their ideas, opinions, suggestions which are in line with our institute's Vision and Mission Statements are considered by the AMC for decision making.

The Institution promotes a culture of participative management at all levels right from the students up to the faculty members. The College promotes participative management. Ideas pertaining to academic goals, organizational progression and better campus life are collected from all stakeholders to promote efficient functioning of the College. The staff and other stakeholders help in infusing a positive attitude that leads to increased efficiency, improved communication, heightened morale, motivation and job satisfaction. Believing in decentralization, the Management takes policy decisions, finance, infrastructure etc. with the help of members of the College Committee.

The Governing Body delegates all the academic decisions based on the policy to the various monitoring committees headed by the Principal in order to accomplish the vision and mission of the institution. Faculty members are given representation in various committees / cells and allowed to conduct various programs to exhibit the abilities of both students and faculty members.

The needed skills of Life Skills, Employability Enhancement Courses are incorporated in the new curriculum in order to encourage the students to develop the skills need of the hour. Students are empowered to play an active role as coordinator for curricular, co-curricular and extracurricular activities. Our Institution's focuses on advanced research in the areas of science, engineering and technology.

The student representatives are members of the following committees.

- Class Committee
- Anti- Ragging Committee
- Technical Associations and Clubs
- Professional Society Chapters
- Sports Committee

And the members of faculty are part of the following committee

- Governing Body, Academic Council, Board of Studies and Finance Committee
- Academic Monitoring Committee
- Planning and Development Committee
- Internal Exam Cell
- Anti Ragging Committee

- Anti Ragging Squad
- Sexual Harassment Committee
- Grievance Redressal committee
- Professional Society Chapters

The involvement contributes towards improvement in academic, ragging free campus, empowerment of women.

Following are the other activities involved in the institution:

- Research Promotional activities
- Remote centre
- National Nodal centre for Cyber Safety and Security Standards
- Planning and development Cell
- Institute Industry partnership Cell
- Entrepreneurship Development Cell
- Campus Connect
- Women Empowerment Cell
- Smart India Hackathon

List of Members of Governing Body

```
Sl. No.
```

Members as per UGC Norms

Name of the Members

```
1
```

Chairperson

ThiruJansons T.S. Natarajan

President, Sengunthar Charitable Trust

Tiruchengode

```
2
```

Management Member

Prof. A. Baladhandapani

Secretary and Correspondent

```
Sengunthar Charitable Trust
Tiruchengode
3
Management Member
Mr. M.K. Dhanasekaran
Treasurer, Sengunthar Charitable Trust
Tiruchengode
4
Management Member
Mr. T. Shanmugasundaram
Joint Secretary, Sengunthar Charitable Trust
Tiruchengode
5
Management Member
Er. A.B. Madhan
CEO,
Sengunthar Institutions
6
Management Member
Mr. T. AravindThirunavukkarasu
Director Corporate Relations and Training
Sengunthar Institutions
```

7
#### UGC Nominee

Prof. M. R. Bhagwan Singh

Professor of Mech. Engg. (Retd.)

B.M.S College of Engineering

Bull Temple Road, Basavangudi

### Benguluru

```
8
```

State Government Nominee

Prof. M. Deepak Kumar

Assistant Professor

Department of Metallurgical Engineering

Government College of Engineering

Salem

#### 9

University Nominee

Dr. S. Kalaiselvam

Professor

Department of Applied Science and Technology

AC Tech Campus

Anna University

## Chennai

10

Industrialist

Dr.R.Venkatesan

Group Head & Scientist G Ocean Observation Systems National Institute of Ocean Technology

Chennai

11

Academician

Dr. M. Umapathy

Professor

Department of Instrumentation and Control Engineering

National Institute of Technology

Tiruchirapalli

```
12
```

Teachers of the College

Dr. K.L. Palanisamy

Dean (Student Affairs) cum Professor and Head

Department of Science and Humanities

13

Teachers of the College

Dr. B. Sujatha

Dean (Academics) & Professor

Department of Computer Science and Engineering

14

Principal of the College

(Ex - Officio)

## Dr. C. Venkatesh

## Principal

## Sengunthar Engineering College

File Description	Documents
Upload strategic plan and deployment documents on the website	<u>View File</u>
Upload any additional information	<u>View File</u>
Paste link for additional Information	http://scteng.co.in/documents/IQAC/AQAR/AQ AR2020-2021/6.1.2.pdf

## 6.2 - Strategy Development and Deployment

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

## Objectives

The primary goal is to equip the students with relevant and conceptualized professional skills and in turn to guide them towards a deserving career all around the world with the values of 'Sincerity', 'Hard Work' and 'Ethics'.

Motivation

- To make students academically sound, skillful, and prepare them for life-long learning.
- To make the learning "student-centric" rather than "teachercentric"
- Faculties are encouraged to use ICT tools for effective Teaching -Learning
- Ensuring effective governance through decentralization
- Students overall development through active participation
- Effective Training for better placement
- Financial Planning & Management

## Methodology

• Plan Academic schedule and Time Table

- Commencement of classes
- Conduct of internal assessment test
- Evaluation and Analysis
- Feedback and Remedial measures
- Conduct of End Semester Examination
- Result Analysis

#### Outcomes

- Attainment of course outcome
- Improved result and better placement
- Gained knowledge and skill development

#### Future Plan

- Improvement in research activities and faculty publication
- Focus on Consultancy activities

The Institute has prepared a strategic plan to fulfill the infrastructure, Academic Development, extracurricular activities, Sports, Cultural and defined target for the infrastructural facilities and academic development of the Institute. These targets have been set with extensive consultation with all holders, faculty, alumni, management and industry.

Perspective plan of the Institute for the period of 2021-2025,

- NAAC Accreditation with `A+' Grade
- NBA Accreditation for eligible programmes
- To have 50% of the Faculty with Ph.D qualification.
- Promote industry-institution collaboration with top MNCs.
- Enhance the research and consultancy activities
- Renovate infrastructure facilities and support systems
- Introduce new programmes on current trend domains
- Improve the teaching learning process
- Enhance the Alumni interaction and outreach activities
- Conduction of training and value added courses
- Empower the EDC and WEC activities

Deployment of Strategic Plan

- NAAC Accreditation with A+ Grade
  - More focus will be given to Teaching -Learning and Research & Development to attain NAAC with A+ grade in the second cycle of accreditation
  - Best practices and innovation are to be more focused.

- NBA Accreditation for eligible programmes
  - It is necessary to acquire all the eligible UG programs accredited by the NBA from time to time.
  - Strengthen the departmental activities to meet the growing needs in academia and research.
- To have 50% of the Faculty with PhD qualification.
  - Encourage faculty to register for Ph.D.
  - Support faculty who have already registered to complete their Ph.D.
  - Provide financial support for participation and publication
- Promote industry-institution collaboration.
  - Enhancing the number of MOUs with Industry and revisiting the existing MOUs based on its merits.
  - Collaboration with Industries for research and innovative projects.
  - Increasing the connect with the Industry through guest lectures and expert's talk
  - Increase industrial visits/internships and make it more accountable.
- Enhance the research and consultancy activities
  - To enhance the quality of research publications by motivating faculty to publish in SCI/Scopus indexed journals.
  - Focus on increasing the external funded research projects
  - Fostering Industry sponsored R&D projects.
  - Enhance the Consultancy projects.
- Renovate infrastructure facilities and support systems
  - Academic infrastructure to be strengthened further
  - Renovate the laboratories and computing facilities
  - Online access materials shall be provided
  - To upgrade the internet bandwidth to support the continuous utilization
- Introduce new programmes on current trend domains
  - Introduction of new courses on current trend domains such as Cyber Security, Artificial Intelligence and Data Science
  - Curriculum and Syllabus shall be framed and get approval of BoS

- Improve the teaching learning process
  - Implement pedagogical innovations: OBE, active learning, open ended experiments. Extended classrooms (virtual class rooms): Lecture capturing.
  - Blended learning: E-learning, virtual labs, NPTEL/MOOCs,
  - Comprehensive course implementation.
  - Encourage self-learning techniques.
- Enhance the Alumni interaction and outreach activities
  - Improve the involvement of alumni in all the aspects of Institutions development by collaborating with them in placements, guest lecture, mentoring students in various projects, mentoring incubate, research and development, consultancy.
- Conduction of training and value added courses
  - Skill development training programmes to be conducted for faculty enrichment
  - To meet out the industry requirements value added courses to be conducted for the students

## • Empower the EDC and WEC

- Encourage more campus companies to provide start-up opportunities for our students.
- Conduction of idea competition start up challenge
- Provide the necessary infrastructure for incubating the ideas and start up
- Enhance the EDC activities and programmes
- Enhance the activities and programmes of WEC to leads a healthy/wealth life style of women faculty and students

File Description	Documents
Strategic Plan and deployment documents on the website	<u>View File</u>
Paste link for additional information	http://scteng.co.in/documents/IQAC/AQAR/AQ AR2020-2021/6.2.1.pdf
Upload any additional information	<u>View File</u>

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

The Institution has various committees and all the committees are effectively functioning to meet out its objective and to the satisfaction of all the stakeholders. The effective functioning of the committee is monitored by the committee chairman. Our Institution has gotten tremendous benefits that have been reflected in other metrics.

COMMITTEE LIST

#### STATUTORY BODIES

- Governing Body Committee
- Academic Council Committee
- Board of Studies Committee
- Finance Committee

#### NON - STATUTORY BODIES

- Planning and Evaluation Committee
- Grievance Redressal Committee
- Examination Committee
- Admission Committee
- Library Committee
- Student Welfare Committee
- Sexual Harassment Committee
- Extra Curricular Activities Committee
- Academic Audit Committee

List of Members of Governing Body

Sl. No.

Members as per UGC Norms

Name of the Members

#### 1

Chairperson

ThiruJansons T.S. Natarajan

President, Sengunthar Charitable Trust

Tiruchengode

```
2
```

Management Member

Prof. A. Baladhandapani

Secretary and Correspondent

Sengunthar Charitable Trust

Tiruchengode

#### 3

Management Member

Mr. M.K. Dhanasekaran

Treasurer, Sengunthar Charitable Trust

Tiruchengode

## 4

Management Member

Mr. T. Shanmugasundaram

Joint Secretary, Sengunthar Charitable Trust

Tiruchengode

5

Management Member

Er. A.B. Madhan

CEO,

Sengunthar Institutions

6

Management Member

Mr. T. AravindThirunavukkarasu

Director Corporate Relations and Training

Sengunthar Institutions

7

UGC Nominee

Prof. M. R. Bhagwan Singh

Professor of Mech. Engg. (Retd.)

B.M.S College of Engineering

Bull Temple Road, Basavangudi

Bengaluru

#### 8

State Government Nominee

Prof. M. Deepak Kumar

Assistant Professor

Department of Metallurgical Engineering

Government College of Engineering

Salem

```
9
```

University Nominee

Dr. S. Kalaiselvam

Professor

Department of Applied Science and Technology

AC Tech Campus

Anna University

Chennai

10

Industrialist

Dr.R.Venkatesan

Group Head & Scientist G Ocean Observation Systems National Institute of Ocean Technology

Chennai

11

Academician

Dr. M. Umapathy

Professor

Department of Instrumentation and Control Engineering

National Institute of Technology

Tiruchirapalli

12

Teachers of the College

Dr. K.L. Palanisamy

```
Dean (Student Affairs) cum Professor and Head
Department of Science and Humanities
13
Teachers of the College
Dr. B. Sujatha
Dean (Academics) & Professor
Department of Computer Science and Engineering
14
Principal of the College
(Ex - Officio)
Dr. C. Venkatesh
Principal
Sengunthar Engineering College
LIST OF MEMBERS ACADEMIC COUNCIL
SL. NO.
MEMBERS AS PER UGC NORMS
MEMBERS NOMINATED
1.
```

```
т.
```

The Principal (Chairman)

Dr. C. Venkatesh

All the Heads of Departments in the college

Dr.M.Seenirajan, Chairman, BOS / Civil
 Dr. M. Sakthivel, Chairman, BOS / CSE
 Dr. C. Aarthi, Chairman, BOS / ECE
 Dr. K. Umadevi, Chairman, BOS / EEE
 Dr. M. Selvakumar, Chairman, BOS / Mech
 Dr. P. Govindasamy Chairman, BOS / MBA
 Prof. P. Thangarasu, Chairman, BOS / Chemistry

3.

Four Teachers of the college representing different categories of teaching staff by rotation on the basis of seniority of service in the college.

Dr. B. Sujatha, Dean (Academics)
 Dr. G. Jayamurugan, AsP / CSE
 Prof. T. Gohila, AsP/ EEE
 Prof. S. Bhuvana, HOD / English

4.

Not less than four experts from outside the college representing such areas as Industry, Commerce, Law, Education, Medicine, Engineering, etc., To be nominated by the Governing Body.

1. Mr. V. S. Ramesh, Director,

M/s. STEPS Knowledge Services Pvt. Ltd, Coimbatore.

1. Shri T.N. Thirukkumar, MD,

Jansons Industries, Tiruchengode.

1. Dr. N. Nagarajan, Principal,

Coimbatore Institute of Engineering and Technology, Coimbatore.

1. Dr. R. Satish Kumar, Principal,

Sengunthar College of Engineering, Tiruchengode.

5.

Three nominees of the university

1. Dr. K. Chinnakali,

Professor/Physics, CEG, Anna University, Chennai-25.

1. Dr. B. Kothandaraman,

Professor/Rubber and Plastic Technology,

Anna University, Chennai-44.

1. Dr. S. MoorthyBabu,

Professor/Crystal Growth Centre,

Anna University, Chennai-25.

6.

A faculty member nominated by the Principal (Member Secretary).

Dr. K. L. Palanisamy,

Chairman, BOS / S& H

List of Members of Finance Committee

SL. NO.

MEMBERS AS PER UGC NORMS

MEMBERS NOMINATED

1.

The Principal (Chairman)

Dr.C. Venkatesh

```
2.
```

University Nominee

Mr. T. Nagarajan,

```
Deputy Registrar (Salary),
```

Anna University,

Chennai - 600 025.

3.

Member nominated by the Governing Body of the College

Thiru. T. Shanmugasundaram,

Joint Secretary,

Sengunthar Charitable Trust,

Tiruchengode - 637 205.

4.

A Senior-most Teacher of the College nominated by the Principal

Mr. C. Kandasamy,

Assistant Professor in Chemistry

The Functions of various Bodies:

The Finance -Committee, the Buildings-Committee and the Hostel Committee take important decisions regarding finance, building construction, renovation and maintenance and issues related to the college hostel. There is also the Teachers' Council and the Association of the Non-teaching staff.

Service Rules, Procedures, Recruitment and Promotion Policies:

Service rules and procedures are guided by the Anna University First Statutes (latest edition), the Constitution of the college and the rules of the State Government as amended from time to time in this regard.

The recruitment rules for the teaching staff are as per the norms along with the eligibility criteria prescribed by the UGC; that for the non-teaching people satisfies as per norms.

The promotional policies for teachers are according to G.O. and for non-teaching staff according to norms.

Grievance Redressal Mechanisms:

There are several Grievance Redressal Mechanisms including the Anti-Sexual Harassment Cell with its Internal Complaints Committee; the Anti-Ragging Cell; a Grievance Redressal Cell with complaints boxes prominently placed and the full implementation of the Right to Information.

File Description	Documents
Paste link to Organogram on the institution webpage	http://scteng.co.in/About/College
Upload any additional information	<u>View File</u>
Paste link for additional Information	http://scteng.co.in/documents/IQAC/AQAR/AQ AR2020-2021/6.2.2.pdf

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

A. All of the above

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

## 6.3 - Faculty Empowerment Strategies

6.3.1 - The institution has effective welfare measures for teaching and non-teaching staff and

avenues for their career development/ progression

```
Welfare measures for Teaching Staff:
```

- Sengunthar Employees Welfare Fund
- Group Insurance.
- Festival advance.
- Medical Leave
- Earned Leave
- Free Transport Facility
- Prompt facilitation of Provident Fund loans.
- Hostel Accommodation facility
- On-Duty for attending programmes
- Financial assistance for FDP, Journal and workshop.
- Maternity Leaves to female staff
- Facility of Wi-Fi in campus.
- Ph.D. Increments to Teaching staff (Ph.D Allowance)

Welfare measures for Non-Teaching Staff:

- Membership of Group Insurance
- Sengunthar Employees Welfare Fund
- Festival advance.
- Festival bonus.
- Prompt facilitation of Provident Fund loans.
- Help with facilitation of bank loans.
- Crash Course in Computer Basics for Supporting Staff.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	http://scteng.co.in/documents/IQAC/AQAR/AQ AR2020-2021/6.3.1.pdf

**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

36

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

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

8

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.)

## 56

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

## 6.4 - Financial Management and Resource Mobilization

6.4.1 - Institution conducts internal and external financial audits regularly

The Institution has established a mechanism for conducting internal and external audits on the financial transactions every year to ensure financial compliance. Internal audit is conducted half yearly by the internal financial committee of the institution. The committee thoroughly verifies the income and expenditure details and the compliance report of internal audit is submitted to the management of the institution through principal. External audit is conducted once in every year by an external agency.

The mechanisms used to monitor effective and efficient use of financial resources are as below:

- Before the commencement of every financial year, the principal submits a proposal on budget allocation, by considering the recommendations made by the heads of all the departments, to the management.
- College budget includes recurring expenses such as salary, electricity, internet charges, maintenance cost, stationery, other consumable charges etc., and non - recurring expenses like lab equipment purchases, furniture and other development expenses.
- The expenses will be monitored by the accounts department as per the budget allocated by the management.
- The depreciation costs of various things purchased in the preceding years are also worked out.

Process of the internal audit:

All vouchers are audited by an internal financial committee on a half yearly basis. The expenses incurred under different heads are thoroughly checked by verifying the bills and vouchers. If any discrepancy is found, the same is brought to the notice of the principal. The same process has been followed for the last five years.

Process of the external audit:

The accounts of the college are audited by chartered accountants regularly as per the government rules. The auditor ensures that all payments are duly authorized after the audit, the report is sent to the management for review. Any queries in the process of audit would be attended immediately along with the supporting documents within the prescribed time limits. The institution did not come across any major audit objection during the preceding years.

All these mechanisms exhibit the transparency being maintained in financial matters and adherence to financial discipline to avoid

defalcation of funds or properties of the institution at all levels. The audited statement is duly signed by the authorities of the management and chartered accountant.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	http://scteng.co.in/documents/IQAC/AQAR/AQ AR2020-2021/6.4.1.pdf

# 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)

r		
	,	

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

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

## Sources of funds are as follows:

- Fees: Fees charged as per the university and government norms from students of various granted and self financed courses.
- Autonomous Collection: Autonomous fees collected from students towards consolidated and provisional Mark statements, exam fee and mark statement fee.
- 3. Interest and funding from other collections:

Bank interest and funding from other collections towards PMKVY Training programme, AICTE -STTP are other sources.

The institute has a well-defined mechanism to monitor effective and efficient utilization of available financial resources for the development of the academic processes and infrastructure development.

- Institutional budget is prepared by Principal every year taking into consideration of recurring and non-recurring expenditures.
- Accordingly, all the administrative and academic heads are requested to submit the budget required for the subsequent financial year. Along with this all coordinators of different cells viz., R& D Cell, Exam Cell, T&P Cell, NSS Cell, etc. are instructed to submit their budget to Principal.
- All the major financial decisions are taken by the Institute's Local Managing Committee (LMC/CDC) and Governing Body (GB).
- As and when urgent requirements arise it is given after sanctioned revived from Management.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional Information	http://scteng.co.in/documents/IQAC/AQAR/AQ AR2020-2021/6.4.3.pdf

## 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)

Internal Quality Assurance Cell (IQAC) has been established in the institution for initiatingquality enhancement schemes. It has been constituted as per the format prescribed by theNAAC and meetings are held periodically. Quality assurance strategy and processes are being discussed and subsequently reviewed by IQAC cell.

IQAC is one of the major policies making implementing units in college. It strives hard for upgrading the college infrastructure and all support facilities to meet the standards of education and growing needs of students. It assesses and suggests the parameters of quality education.

The initiatives undertaken are,

- Formation of IQAC cell
- Formation of alumni association

- Syllabus revision
- Initiating NAAC Preparation Work
- Initiating AAA Audit
- AICTE FDP Program
- NBA awareness program to Faculty members
- Constituting Various committees
- Review of performance of teaching non-teaching staff
- Feedback collection from students, faculty and alumni
- Review of teaching learning process
- Improving library facilities
- Participation in NIRF

Best Practices

Best Practice - 1

1. Title of the practice

"Online Examination System"

#### 2. Goal

True education is to inculcate a thirst to apply all learned knowledge in their day to day life. It will improve the quality of education among the students. Indeed, The quality of education is reflected in the End Semester Examinations. The End Semester Examinations have been conducted through Proctored Online Mode in our college in association with e-NOVA Software Solutions, Coimbatore. It enhances the perception of the students' thirst for education and broadens their horizons in the challenging and changing world. It also helps the Institution to maintain the quality of its educational Programmes.

3. The Context

Educational Systems and Methodology are growing at a rapid rate. Simultaneously, the quality of Education is nurtured in the institution by conducting examinations during the lockdown period. The conduction of End Semester Examinations simplifies through the system which was adopted in the college for carrying out the activities of the examination. An online proctored examination enhances the quality of education.

## 4. The Practice

The best Practices in this system are listed below

- Username and Password for the mock examination and End Semester Examination shared to the students' through their official email. Once a user logs into the system with Username and Password, it takes the students to take a photograph with their details. If the student does not give access to any of these, the student cannot be able to appear for the examination or the remote proctor can disable the examination in due course of time.
- The system uses Artificial intelligence (AI) to detect and record face emotions, eye movements and all activities, without any hindrance to the examinations.
- In addition to auto proctoring by the online examination system, Manual Proctors (Invigilators) continuously watch and monitor the students during the entire duration of the examination.
- The proctor with the help of the system can issue regular warnings on the screen of the student device. The examination is auto submitted after the completion of the total duration of the examination However; students facing any technical issue during the examination can continue upto 15 minutes after the scheduled session time.
- All the actions were closely monitored by the remote proctors during the examination.
- All the Activities were automatically recorded
- Capture of facial photo. During the examination, the AI tool constantly monitors the picture of the student taking the examination with the facial photo captured initially for any mismatch. In case of any mismatch, the system captures the anomaly and a notification to the student / live proctor was also instantly displayed.

#### 5.Evidence of Success

The Evidence for success is seen in the feedback received from the students regarding the examination. Some of their comments are given below:

- The main satisfaction is any technical issues the students can contact the Class Advisor immediately to solve it.
- Overall performance of the students in their written exam is satisfactory

#### 6.Problems Encountered

Mock examination is mandatory. It is intended to familiarize the

students to the examination environment and validate the compatibility of their Desktop/Laptop/Smart-Phone/Tablet or other devices. Further, Problems Encountered during the mock examinations and few technical problems were solved by the technicians before the End Semester Examinations.

Best Practice - 2

1. Title of the practice

"Learning Management System"

2. Goal

A true education is to inculcate a thirst to apply all learned knowledge in their daytoday life. It will promote Research attitude among the students. The Learning Management System is introduced in this Institution to promote students' worldly wisdom. It gradually changes the perceptions of the students and broadens their horizon in the challenging and changing world. When the learning practice is simplified, it would enhance the interest in all the arenas. Learning Management System would help the students to get a clear perspective to select their Post Graduate career Program and Doctoral Degree program.

LMS software helps to plan, implement, facilitate, assess, and monitor students' learning. It also helps the Institution to maintain the integrity of their educational Programmes. It enables faculty members to effectively and efficiently develop Courses, deliver instruction, facilitate Communication, foster collaboration and assess students. LMS can be used to support traditional face-to-face instruction, as well as blended and online educational environments.

## 3. The Context

Educational Systems and Methodology are growing at a rapid rate. This system simplifies and attracts the learners to learn new techniques in their respective field. LMS fulfills and enhances knowledge of students' thirst.

#### 4. The Practice

The Institution had introduced innovative SEC LMS developed by the faculty members. The LMS provides a new world of possibilities to take the learning to a new level.

- Faculties create their Courses/Lessons in the LMS Software.
- Faculty members create their assignments and tests and students can take the tests as many times to practice untiltheybecome perfect.
- The Interactive White Board is used to make both teaching and learning more effective, clear, fun and engaging. Its whiteboard is a super portable system. Capture devices also allow users to capture all of the ink strokes that are written on the whiteboard. When used in conjunction with a video projector it turns the ordinary whiteboard surface into a fully interactive whiteboard.
- 1. Evidence of Success

The Evidence for success is seen in the feedback received from the students and staff members. Some of their comments are given below:

- LMS has improved the performance of the faculty members and teaching quality and their integrity.
- Overall performance of the students in their written exam is satisfactory which exhibits the effective and innovative teaching methodology of the faculty members.
- Most of the students have performed well taking care of the minute details of the English Grammar. The students can demonstrate their creative skills.

5.Problems Encountered

Few technical problems encountered in the LMS and which were solved by the technicians.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	http://scteng.co.in/documents/IQAC/AQAR/AQ AR2020-2021/6.5.1.pdf

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

IQAC being the central body within the college monitors and reviews the teaching-learning process regularly. Institutional

strategic plan and activities are followed for the attainment. The feedback received from various stakeholders. Based on feedback various innovative activities and reforms were introduced. The improvements based on feedback implemented are:

IQAC periodically reviews the teaching-learning process, structures & methodologies of operations, and learning outcomes:

The standard methods of teaching, learning, and evaluation which are proven over the years are being followed.

Academic Calendar: Based on the University Academic Calendar the Institute schedules the academic calendar well in advance at the start of the year with ample time frame for not only the regular teaching-learning process but also to accommodate the various events like seminar/ guest lecture/ workshops/FDPs/ Hands-onseries and many more.

Preparation of lesson plan for each Semester: The lesson plan is prepared by the faculty members for all the subjects they teach in that particular semester. Enriching the curriculum with guest lectures, industrial visits, and Internships

Faculty Class Record: Everyday faculty prepare and submit details of the lecture along with the topic covered on an online portal.

Evaluation of teachers by students: The institution has a feedback system to evaluate the teachers by students. The regular evaluation of the teachers by the students, feedback on teaching methodologies, course delivery, attitude, strengths and weaknesses, difficulties faced in the subject give a clear idea about the problems faced by the students. Director and management also monitor the feedback system and take appropriate corrective actions.

Student learning outcomes: The institute monitors the performance of the students regularly. It has specified procedure to collect and analyze data on student learning outcomes; the following points are adopted by the institute in this context:

- Regular class tests and interactions
- Continuous Evaluation comprising internal tests, assignments, group discussions, and seminar presentations.
- Semester system of examination for all courses.
- Providing Question banks of various subjects to the students.

- Providing Lecture notes through an online portal
- Timely Redressal of students' grievances.
- At least 75% Attendance is compulsory in each semester.
- Extra classes for weak students to solve their problems.

Effective internal examination and evaluation systems: Institute maintains an effective internal examination and evaluation system.

Students' result analysis: Institute has the provision of analysis of students' performance after the announcement of their semester results. If the result of the students, in a subject, is not found up to the mark, necessary steps are taken to find out the reasons and the concernedfacultymembersarecounselledandmotivatedtoworktowa rdsimprovement.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	http://scteng.co.in/documents/IQAC/AQAR/AQ AR2020-2021/6.5.2.pdf

A. Any 4 or all of the above

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	http://scteng.co.in/documents/Academics/An nualReport/AnnualReport2021.pdf
Upload e-copies of accreditations and certification	<u>View File</u>
Upload details of quality assurance initiatives of the institution	<u>View File</u>
Upload any additional information	<u>View File</u>

## INSTITUTIONAL VALUES AND BEST PRACTICES

## 7.1 - Institutional Values and Social Responsibilities

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

The concept of gender equity refers to "fairness of treatment for both women and men, according to their respective needs. This may include equal treatment or treatment that is different but which is considered equivalent in terms of rights, benefits, obligations and opportunities"

Education deals with the formation of habits of human beings. If so, we need education seriously to focus on promoting the equal participation of women and men in making decisions; reducing enrolment gap between women's and men's access; giving equality in learning process, educational outcomes and external results; and providing equal benefits for both sexes.

Gender equity has been encouraged in the recruitment of both teaching and non-teaching staff in our educational institutions. In addition, provisions have been made for women employees to get maternity leave.

The institute has a policy of appreciating faculty without gender bias. Women faculty are nominated, based on their ability, as deans, heads of the departments and conveners of various committees and discharging their duties efficiently

Separate NSS unit is functioning exclusively to encourage the female students and the unit is successfully conducting various activities to serve the society. Female students actively participated in the various events conducted by the NCC unit of our college. Equal opportunities provided to the female students to participate in all the events like Students Technical Symposium, Celebrations of important days, Sports events, Cultural events and so on.

Women empowerment cell is effectively functioning in our college and it has been conducting various programmes on gender bias and stereotyping, feminine hygiene, gender equity and women's rights. Our institution prominently displays women's helpline numbers at different places on campuses.

Women's Day Celebration 2021

MAHILA Club& WomenEmpowerment Cell celebrated International Women'sDayCelebrationon 9th March 2021 at 11a.m. through online mode to raise awareness about the status and dignity of women among the students. The Chief Guest of the programme was Ms. M. K. Kalaiselvi, Joint secretary, Insurance Corporation Employees Union, SalemDivision. Chief Guest pointed out that the female worked against the spread of disease as a Health Minister, Doctor, Health worker during the Covid 19 pandemic. Finally female students showcased their talents in the various events and the students were appreciated with prizes.

Counseling and Guidance to Hostel Students

Counseling and Guidance on Feminine Hygiene and Health to the Girls Students staying in the Hostel is provided by the Team of Female Faculty Members from Mahila Club every month.

Safety and Security in the Campus for Girls Students

Safety and security of all the students, teachers, non-teaching staff and the visitors to the college is always the first priority. To ensure a safe campus and a secured environment the college has taken the following initiatives:

- Safety and Security of the Girls Students in campus should be ensured by Installing CCTV cameras and monitoring Campus Security Personal.
- Grievance Redressal Cell provides an accurate solution for the grievances received from the students.
- Sexual Harassment Cell functioning to prevent sexual harassment by promoting gender equality and gender amity among Students
- Contact numbers of HoDs/Class Advisors have been informed to

their parents for any enquiry related to the students academic progress and safety.

Awareness on Social Media Security

 Awareness on Social Media Security is created among the Students and Staff by conducting a webinar on "Cyber Security - Need of the hour" which was organized by IEI -ELC and SEC - IIC on 27.05.2021. Resource Person: Dr E.Khalieraaj, Addl. Director - General, National Cyber Safety and Security Standards, New Delhi.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional Information	http://scteng.co.in/documents/IOAC/AOAR/AO AR2020-2021/7.1.1.pdf

7.1.2 - The Institution has facilities for alternate sources of energy and energy conservation: Solar energy Biogas plant Wheeling to the Grid Sensor-based energy conservation Use of LED bulbs/ power-efficient equipment A. Any 4 or All of the above

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

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

Sengunthar Engineering College is committed to "zero waste" and reducing the environmental impact of its activities through its philosophy of "reduce-reuse-recycle". It advocates conservation of resources, especially natural resources, to generate minimal waste and manage it from its inception to its final disposal. Routine waste is daily collected in dustbins at different locations, segregated into different types of bio and non-bio degradable waste and non-bio degradable wastes taken to the dumping yard. Biodegradable wastes are converted into nutrient rich manure in the Vermicomposting Plant.

#### Efforts for Waste Management include the following:

The Vermicomposting Plant is established to decompose the biodegradable wastes generated at our college campus and also demonstrated to the students about the construction of the plant. Solid waste such as fallen leaves and kitchen wastes are collected from the various points of sources and segregated according to their nature. Nutrient rich manure is produced from the biodegradable wastes by the Vermicomposting Process. The vermi compost is used in the College garden.

Used Papers, old newspapers, damaged note books and files are given for recycling to the external agencies. Double sided printing is encouraged to minimize the paper waste.

#### E-waste management:

The e-waste is limited in the campus by maintaining a repair centre for computers and computer-based items. The computer maintenance and repair is centralized for better coordination and all the repair or non-operating complaints are streamlined and the report of the repair service is monitored. The irreparable systems are discarded and the usable parts are used for the replacements. The discarded parts of the systems and other electronic equipment are sold out to vendors for their own recycling process.

Food waste: 15 Kgs of food waste is generated from the hostel and canteen per day which is sent to piggeries. Quantity of food waste generated in the Hostel is monitored by the Warden and the Management periodically and the necessary steps have been taken to reduce the food waste by giving awareness among the students.

Stopping or limiting the usage of non-biodegradable material like plastic bags inside the campus.

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

A. Any 4 or All of the above

## 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:

- **1. Restricted entry of automobiles**
- 2. Use of bicycles/ Battery-powered vehicles
- **3.**Pedestrian-friendly pathways
- 4. Ban on use of plastic
- 5. Landscaping

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

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

7.1.6.1 - The institution's initiatives to A. Any 4 or all 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	<u>View File</u>
Certificates of the awards received	<u>View File</u>
Any other relevant information	<u>View File</u>

7.1.7 - The Institution has a disabled-friendly A. Any 4 or all 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	<u>View File</u>
Details of the software procured for providing assistance	<u>View File</u>
Any other relevant information	<u>View File</u>

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

The institution believes in equality of all cultures and traditions as is evident from the fact that students belonging to different caste, religion, regions are studying without any discrimination. Though the institution has diverse socio-cultural background and different linguistics, we do not have any intolerance towards cultural, regional, linguistic, communal socio economic and other diversities. Institution is undertaking various initiatives in the form of celebration of days of Eminent personalities, National Festivals, NSS, YRC, Annual Day, Sports Day, National Level Students Technical Symposium and other such activities to provide for an inclusive environment by bringing students and teachers with diverse backgrounds on a single platform. These functions help in developing tolerance, harmony towards culture, region and linguistics and also communal, socioeconomic and other diversities.

1. Name of the Programme: Muniswaran Temple Cleaning Work

Category of Programme: Communal / Religious diversity and Harmony

On 08.03.2021, our NSS organized the "Clean India Safe India" activity at the Muniswaran Temple near Sengunthar Engineering College, Tiruchengode. Our 30 NSS Volunteers from diverse cultural and regional backgrounds actively participated and cleaned the Temple.

2. Name of the Programme: Covid-19 Awareness for the Local People during pandemic

Category of Programme: Socio-economic diversity and Harmony

S	.No	

#### Date

Name of the activity

Place of activity

#### 1

23.04.2021

COVID- Awareness for local people

Cadets hometown

Coronavirus disease (COVID-19) is an infectious disease caused by

the SARS-CoV-2 virus. Most people infected with the virus will experience mild to moderate respiratory illness and recover without requiring special treatment. However, some will become seriously ill and require medical attention. Older people and those with underlying medical conditions like cardiovascular disease, diabetes, chronic respiratory disease, or cancer are more likely to develop serious illness. The best way to prevent and slow down transmission is to be well informed about the disease and how the virus spreads. Wearing a properly fitted mask, and washing your hands or using an alcohol-based rub frequently. Get vaccinated when it's your turn and follow local guidance.

Our college NCC Cadets have created poster presentations, drawings and provided masks for the children in their area by explaining about the causes of COVID-19 and preventive measures to be followed for a healthy life.

COVID - 19 PRECAUTION AND PREVENTION ACTIVITIES BY OUR NCC CADETS

3. Name of the Programme: Pournami Kavi Arangam by Nuvazhi Tamil Mandram

Category of Programme: Linguistic diversity and Harmony

Pournami Kavi Arangam is conducted every month in association with Nuvazhi Tamil Mandram. Besides, Tamil poem composing, essay writing, oratorical competitions are also conducted every year.

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:

SEC undertakes different initiatives by organizing various activities to sensitize students and employees to the constitutional obligation, values, rights, duties and responsibilities of the citizens.

1. Republic Day & Independence Day Celebrations

Every year Republic day is celebrated on 26th Jan by organizing activities highlighting the importance of the Indian Constitution. Similarly constitution day also would be celebrated on 26th Nov every year. Independence Day is also celebrated every year to highlight the struggle of freedom and the importance of the Indian constitution.

## 2.Constitution of India

Sengunthar Engineering College (Autonomous) has introduced as a mandatory course 19MDC601 Constitution of India at UG Degree level across all engineering disciplines to create awareness and sensitization of the students and employees to constitution obligations.Webinar on "Constitution of India" conducted on 25.01.2021 for the staff members of our college to create awareness about their rights and duties as a citizen of India.

#### 3. Students Induction Programme

Two weeks Students Induction Programme (SIP) conducted for freshers admitted in the UG programmes from 09.11.2020 to 21.11.2020.

The Student Induction Programme is to help new students adjust and feel comfortable in the new environment, inculcate in them the ethos and culture of the institution, help them build bonds with other students and faculty members, and expose them to a sense of larger purpose and self exploration.

The term induction is generally used to describe the whole process whereby the incumbents adjust to or acclimatize to their new roles and environment. In other words, it is a well planned event to educate the new entrants about the environment in a particular institution, and connect them with the people in it.

The Student Induction Programme engages with the new students as soon as they come into the institution, before regular classes start. At the start of the induction, the incumbents learn about the institutional policies, processes, practices, culture and values.

List of activities conducted during SIP:

- Lectures on Universal Human Value, Ethics, Communication Skill & Body Language
- 2. Physical Activity & Yoga.

- 3. Opportunities in Engineering field & Research.
- 4. Familiarization to Dept./Branch/Rules & Regulations.
- 5. Speech by Eminent People & Alumni.

4.Programmes conducted

Various Programmes organised to create awareness about the duties and responsibilities of students as a citizen.

S.No

Name of the Activity

Date

1

World Water Day

22.03.2021

2

World Health Day

07.04.2021

#### 3

World Earth Day

22.04.2021

#### 4

World Malaria Day

25.04.2021

## 5

World Telecommunication Day

17.05.2021

#### 6
World Environment Day

#### 05.06.2021

#### 5. COVID AWARENESS FOR LOCAL PEOPLE

Our college NCC Cadets have created poster presentations, drawings and provided masks for the children in their area by explaining about the causes of COVID-19 and preventive measures to be followed for a healthy life.

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

7.1.10 - The institution has a prescribed code A. All of the above 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	<u>View File</u>
Any other relevant information	<u>View File</u>

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

```
The following important days were celebrated in the college.
```

```
S.No
Name of the Activity
Date
1
Republic Day
26.01.2021
2
World Water Day
22.03.2021
3
World Health Day
07.04.2021
4
World Earth Day
22.04.2021
5
World Malaria Day
25.04.2021
6
World Telecommunication Day
17.05.2021
```

7

World Environment Day

05.06.2021

8

Independence Day

01.08.2021

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

### 7.2 - Best Practices

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

Best Practice - 1

1. Title of the practice

"Online Examination System"

2. Goal

True education is to inculcate a thirst to apply all learned knowledge in their day to day life. It will improve the quality of education among the students. Indeed, The quality of education is reflected in the End Semester Examinations. The End Semester Examinations have been conducted through Proctored Online Mode in our college in association with e-NOVA Software Solutions, Coimbatore. It enhances the perception of the students' thirst for education and broadens their horizons in the challenging and changing world. It also helps the Institution to maintain the quality of its educational Programmes.

#### 3.The Context

Educational Systems and Methodology are growing at a rapid rate. Simultaneously, the quality of Education is nurtured in the institution by conducting examinations during the lockdown period. The conduction of End Semester Examinations simplifies through the system which was adopted in the college for carrying out the activities of the examination. An online proctored examination enhances the quality of education.

#### 4. The Practice

The best Practices in this system are listed below

- Username and Password for the mock examination and End Semester Examination shared to the students' through their official email. Once a user logs into the system with Username and Password, it takes the students to take a photograph with their details. If the student does not give access to any of these, the student cannot be able to appear for the examination or the remote proctor can disable the examination in due course of time.
- The system uses Artificial intelligence (AI) to detect and record face emotions, eye movements and all activities, without any hindrance to the examinations.
- In addition to auto proctoring by the online examination system, Manual Proctors (Invigilators) continuously watch and monitor the students during the entire duration of the examination.
- The proctor with the help of the system can issue regular warnings on the screen of the student device. The examination is auto submitted after the completion of the total duration of the examination However; students facing any technical issue during the examination can continue upto 15 minutes after the scheduled session time.
- All the actions were closely monitored by the remote proctors during the examination.
- All the Activities were automatically recorded
- Capture of facial photo. During the examination, the AI tool constantly monitors the picture of the student taking the examination with the facial photo captured initially for any mismatch. In case of any mismatch, the system captures the

anomaly and a notification to the student / live proctor was also instantly displayed.

5. Evidence of Success

The Evidence for success is seen in the feedback received from the students regarding the examination. Some of their comments are given below:

- The main satisfaction is any technical issues the students can contact the Class Advisor immediately to solve it.
- Overall performance of the students in their written exam is satisfactory

6. Problems Encountered

Mock examination is mandatory. It is intended to familiarize the students to the examination environment and validate the compatibility of their Desktop/Laptop/Smart-Phone/Tablet or other devices. Further, Problems Encountered during the mock examinations and few technical problems were solved by the technicians before the End Semester Examinations.

Best Practice - 2

1. Title of the practice

"Learning Management System"

2. Goal

A true education is to inculcate a thirst to apply all learned knowledge in their day today life. It will promote Research attitude among the students. The Learning Management System is introduced in this Institution to promote students' worldly wisdom. It gradually changes the perceptions of the students and broadens their horizon in the challenging and changing world. When the learning practice is simplified, it would enhance the interest in all the arenas. Learning Management System would help the students to get a clear perspective to select their Post Graduate career Program and Doctoral Degree program.

LMS software helps to plan, implement, facilitate, assess, and monitor students' learning. It also helps the Institution to maintain the integrity of their educational Programmes. It enables faculty members to effectively and efficiently develop Courses, deliver instruction, facilitate Communication, foster collaboration and assess students. LMS can be used to support traditional face-to-face instruction, as well as blended and online educational environments.

#### 3. The Context

Educational Systems and Methodology are growing at a rapid rate. This system simplifies and attracts the learners to learn new techniques in their respective field. LMS fulfills and enhances knowledge of students' thirst.

#### 4. The Practice

The Institution had introduced innovative SEC LMS developed by the faculty members. The LMS provides a new world of possibilities to take the learning to a new level.

- Faculties create their Courses/Lessons in the LMS Software.
- Faculty members create their assignments and tests and students can take the tests as many times to practice until they become perfect.
- The Interactive White Board is used to make both teaching and learning more effective, clear, fun and engaging. Its whiteboard is a super portable system. Capture devices also allow users to capture all of the ink strokes that are written on the whiteboard. When used in conjunction with a video projector it turns the ordinary whiteboard surface into a fully interactive whiteboard.

#### 5.Evidence of Success

The Evidence for success is seen in the feedback received from the students and staff members. Some of their comments are given below:

- LMS has improved the performance of the faculty members and teaching quality and their integrity.
- Overall performance of the students in their written exam is satisfactory which exhibits the effective and innovative teaching methodology of the faculty members.
- Most of the students have performed well taking care of the minute details of the English Grammar. The students can demonstrate their creative skills.

6.Problems Encountered

# Few technical problems encountered in the LMS and which were solved by the technicians.

File Description	Documents
Best practices in the Institutional website	http://scteng.co.in/documents/IQAC/AQAR/AQ AR2020-2021/7.2.pdf
Any other relevant information	http://scteng.co.in/IQAC/AQAR/AQAR-2020-20 21

### 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)

The Vision and Mission statement of our institution clearly pointed towards rural based education and development of the rural people at large. A value based education based on the autonomous curriculum which combines with the core values attached for the improvement of the students. The institute is 20 years old, and has a strong bonding with the local and rural people of Tamilnadu. The institute wishes to emerge as a Centre of Academic Excellence by providing students opportunities for teaching the subjects to earn the desired degree and also help them to gain knowledge and skills in subjects beyond the course to make the students ready for the present global job market and mold them to skilled professionals. The institute promotes innovation, research and development for the faculty and students. Some projects are identified and the institute promotes and sponsors them to encourage their zeal towards research. Often the students come up with innovative ideas for startups which are funded by the Management through various lab equipment. For upgrading faculty skills the institution encourages and sponsors them for Ph.D., research, seminars, conferences. Publication of articles and papers and membership of professional bodies are supported by the Management. This has resulted in a good number of publications to direct the institute to achieve its goal to become a centre of excellence. The institute also creates an enabling environment to foster research culture. The college makes information related to research and innovation available by circulating related notices. The institute organizes different activities to enhance the students' personality. Students are trained and groomed to enhance their Employability skills by imparting technical training, Soft skill, GD and Aptitude classes etc. to make the student industry

ready to face the current job market successfully. To upgrade their knowledge and enlighten them on the present trends of technological advancements, regular lectures by eminent professors and industrialists, seminars, workshops, quiz contests are conducted. Majority of students have emerged as professionals of high level and they are pursuing successful careers in various MNCs and corporate houses. Apart from the above activities our institute offers a best in class of Entrepreneurship Activities in different dimensions to bring out the entrepreneurial talents among the students through frequent organizing of Entrepreneurship Awareness Camp with the support of Entrepreneurship Development Institute of India, Ahmadabad. Some students have become entrepreneurs and established their own companies with the support of this cell. Also our institution gives priority to Co curricular and Extra Curricular activities and physical activities, such as Sports, Cultural, Yoga, and Meditation etc.

# 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 is designed by keeping in mind the developmental needs of the society with the guidelines proposed by the UGC, AICTE, Anna University and the TN State Council for Higher Education. The Curriculum is designed to develop the Skills of the students not only domain dependent , but also domain independent like Communication Skills, Self learning, Teamwork and it improves the design ability, analyzing ability, testing ability and synthesis ability.

Curriculum development Process:

The Departmental Committees which comprising team of senior faculty members and Head of the department identify and assess/evaluate in order to make the curricula of the programmes /courses relevant to such needs. This task is done by involving the experts from academia and industry; taking into account the feedback obtained from various stakeholders namely students, alumni, employers and faculty members. The initial phase for ensuring academic quality is the design of the curriculum, in particular, the types of courses, the number of electives, and the curricular structure, with complete details of the course title and course contents based on Blooms Taxonomy as per the regulations. The next phase, the Course Outcomes (COs) for every course is mapped with the Program Outcomes (POs) and Program Specific Outcomes (PSOs) of the program.An effective implementation of this Outcomes Based Education (OBE) ensures that our graduating engineers can compete on a global platform, and have expected global attributes. The Institute keenly observes the attainments of PO and PSO for the respective programs which in turn relates to Vision and Mission of the institution and Department as well. The course designers prepare course outcomes with corresponding Bloom's level and target level of attainment followed by course design

File Description	Documents
Upload additional information, if any	<u>View File</u>
Link for additional information	http://scteng.co.in/documents/IQAC/AQAR/A QAR2020-2021/1.1.1.pdf

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

12

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

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

### 46

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

# **1.2 - Academic Flexibility**

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

22

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

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

-
<b>n</b>
_
_

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

# **1.3 - Curriculum Enrichment**

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

The institution integrates cross cutting issues relevant to gender, environment and sustainability, human values and ethics by introducing specific courses in the curriculum and various activities such as Orientation Programmes for first year students, Women empowerment programmes through Women Development cell (WDC), Carrier Counseling, NSS/YRC/NCC activities. These courses train students to apply analytical thinking in solving issues.

Gender:

Gender Sensitivity Courses like Women Development-Issues and Concerns, Women Empowerment, Women's Rights Awareness and Women's Studies educate the students on gender equality. Women Empowerment Cell addresses the grievances and concerns of the girl students. The cell organizes various activities such as lectures, seminars, panel discussions, Women awareness programs, role plays etc., to create awareness among the girl students. The academic courses that address these issues are

- Constitution of India
- Professional Ethics in Engineering
- Human Rights

Environment and Sustainability:

Each UG degree programme has included with Environmen

The institution integrates cross cutting issues relevant to gender, environment and sustainability, human values and ethics by introducing specific courses in the curriculum and various activities such as Orientation Programmes for first year students, Women empowerment programmes through Women Development cell (WDC), Carrier Counseling, NSS/YRC/NCC activities. These courses train students to apply analytical thinking in solving issues.

#### Gender:

Gender Sensitivity Courses like Women Development-Issues and Concerns, Women Empowerment, Women's Rights Awareness and Women's Studies educate the students on gender equality. Women Empowerment Cell addresses the grievances and concerns of the girl students. The cell organizes various activities such as lectures, seminars, panel discussions, Women awareness programs, role plays etc., to create awareness among the girl students.

The academic courses that address these issues are

- Constitution of India
- Professional Ethics in Engineering
- Human Rights

Environment and Sustainability:

Each UG degree programme has included with Environmental Science as a separate course. It enables a holistic understanding of the environment and develops favorable attitude and habits to protect and preserve nature. Environmentalists from various areas are invited to discuss the current issues related to the present scenario. Number of programmes like awareness campaigns, Seminars and environmental development projects to involve students to work towards environmental sustainability. The constant effort of the NSS team in the Swatch Bharat Mission promotes cleanliness and hygiene in the campus and surrounding areas.

The academic courses that address these issues are

Environmental Science

and Engineering

Transport and Environment

Disaster Management

Air Pollution and Control Engineering

Municipal Solid Waste

Management

Industrial Pollution Prevention and Cleaner Production

Hospital Waste Management

Integrated Water Resources

Management

Ground Water Contamination and Quality Monitoring and Modeling

Climate Change and its Impact

Groundwater Engineering

Air and Noise Pollution Control

Waste Water Treatment

Water Resources Systems

Engineering

Water Supply

Engineering

Engineering Geology

Geo-Environmental

Engineering

Environmental and Social Impact Assessment

Wastewater

Engineering

Structural Dynamics and

Earthquake Engineering

Traffic Engineering and

Management

Environment and Agriculture

## Professional Ethics & Human Values:

Courses are offered on Professional Ethics and Values, Legal aspects of Business, Consumer behavior to develop professionally accepted standards of personal and business behavior, values and guiding principles. It also helps the students to understand the values and how to reflect them in their attitude and behavior and contribution to the society. Extension activities like NCC, NSS and Sports which is mandatory in the curriculum develop leadership skills, promote culture representation and instill human values and social responsibility.

The academic courses that address these issues are

- Human Rights
- Professional Ethics in Engineering
- Hospital Management
- NSS / YRC /RRC
- Legal Aspects of Business

- Organizational Behaviour
- Consumer Behaviour
- Customer Relationship Management
- Labour Legislations

In addition to these courses, the institution has Women Development Cell (WDC), counseling cell and antiragging cell to deal with the issues relevant to gender, human values and ethics. With an emphasis on the need of counseling the young minds, counseling cell is constituted to address the student's behavioral and academic issues. It strives to provide an admissible atmosphere to the students by organizing personality development camps to overcome the gender differences, conducting training programmes for the students and staff on counseling.

Anti-Ragging cell plans the activities like Anti-ragging campaign, formation of anti-ragging squad, Debate, Skits, Awareness talk by Government officials for curbing the ragging menace and making the students aware of human values. The cell addresses the complaints by the students, scrutinizes and approves the reports of the Anti-ragging Squad.

The academic courses that address these issues are

Environmental Science

and Engineering

Transport and Environment

Disaster Management

Air Pollution and Control Engineering

Municipal Solid Waste

Management

Industrial Pollution Prevention and Cleaner Production

Hospital Waste Management

Integrated Water Resources

Management

Ground Water Contamination and Quality Monitoring and Modeling
Climate Change and its Impact
Groundwater Engineering
Air and Noise Pollution Control
Waste Water Treatment
Water Resources Systems
Engineering
Water Supply
Engineering
Engineering Geology
Geo-Environmental
Engineering
Environmental and Social Impact Assessment
Wastewater
Engineering
Structural Dynamics and
Earthquake Engineering
Traffic Engineering and
Management
Environment and Agriculture
Professional Ethics & Human Values:
Courses are offered on Professional Ethics and Values, Legal

aspects of Business, Consumer behavior to develop professionally accepted standards of personal and business behavior, values and guiding principles. It also helps the students to understand the values and how to reflect them in their attitude and behavior and contribution to the society. Extension activities like NCC, NSS and Sports which is mandatory in the curriculum develop leadership skills, promote culture representation and instill human values and social responsibility.

The academic courses that address these issues are

- Human Rights
- Professional Ethics in Engineering
- Hospital Management
- NSS / YRC /RRC
- Legal Aspects of Business
- Organizational Behaviour
- Consumer Behaviour
- Customer Relationship Management
- Labour Legislations

In addition to these courses, the institution has Women Development Cell (WDC), counseling cell and antiragging cell to deal with the issues relevant to gender, human values and ethics. With an emphasis on the need of counseling the young minds, counseling cell is constituted to address the student's behavioral and academic issues. It strives to provide an admissible atmosphere to the students by organizing personality development camps to overcome the gender differences, conducting training programmes for the students and staff on counseling.

Anti-Ragging cell plans the activities like Anti-ragging campaign, formation of anti-ragging squad, Debate, Skits, Awareness talk by Government officials for curbing the ragging menace and making the students aware of human values. The cell addresses the complaints by the students, scrutinizes and approves the reports of the Anti-ragging Squad.

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

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

5	
File Description	Documents
List of value-added courses	<u>View File</u>
Brochure or any other document relating to value- added courses	<u>View File</u>
Any additional information	<u>View File</u>

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

### 74

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

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

345

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

# 1.4 - Feedback System

1.4.1 - Structured feedback an the syllabus (semester-wise / y obtained from 1) Students 2) 7 Employers and 4) Alumni	ear-wise) is	A. All 4 of the above
File Description	Documents	
Provide the URL for stakeholders' feedback report	http://scteng.co.in/documents/IQAC/AQAR/A QAR2020-2021/1.4.1.pdf	
Upload the Action Taken Report of the feedback as recorded by the Governing Council / Syndicate / Board of Management	<u>View File</u>	
Any additional information		<u>View File</u>
1.4.2 - The feedback system of the A. Feedback collected, analysed and action taken made available on the website		
File Description	Documents	
Provide URL for stakeholders' feedback report	http://scteng.co.in/documents/IQAC/AQAR/A QAR2020-2021/1.4.2.pdf	
Any additional information	<u>View File</u>	
TEACHING-LEARNING AND	<b>EVALUATIO</b>	N
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		
200		
File Description	Documents	
Any additional information	<u>View File</u>	
Institutional data in prescribed format	<u>View File</u>	
	-	d categories (SC, ST, OBC, Divyangjan, etc.) (exclusive of supernumerary seats)

145	
File Description	Documents
Any additional information	<u>View File</u>
Number of seats filled against seats reserved (Data Template)	<u>View File</u>

### 2.2 - Catering to Student Diversity

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

Our college adopts a process to identify slow and advanced learners among students. Advanced and slow learners are identified on as per their performance in Continuous Internal Assessment Examinations and End Semester Examinations. In order to ensure academic growth of the institution the Tutor - Ward system implemented to review the academic progress and the tutors motivate their wards to improve their performance.

Identification of Slow and Advanced learners:

To identify advanced and slow learners, we conduct "Student Induction Programme" at the admission into the college for the First year students.Student Induction Programme engages with the new students as soon as they come into the institution; before regular classes start. At the start of the induction, the incumbents learn about the Autonomous regulations and Curriculum, Universal Human Values, etc., and their mentor groups are formed. As early as possible, we identify slow and advanced learners amongst the students through class-room discussion, question and answer method, by considering their subject knowledge and previous year's performance.

From second year onwards, we consider their performance in the performance in Continuous Internal Assessment Examinations and End Semester Examinations. The academic performance of the students helps in identifying the slow and advanced learners.

Special Measures for Slow Learners:

- Academic and personal counseling are given to the slow learners by their subject in-charges, Class advisors and mentors.
- Subject wise Remedial classes are conducted for slow

learners and absentees to improve their academic performance.

- Re-Internal Assessment Examinations conducted for slow learners.
- Provision of simple notes and materials.

Special Measures for Advanced Learners:

- Provision of additional learning and reference material.
- Advanced learners are encouraged to enroll in various online courses.
- Motivated to participate and present papers in various Conferences, Webinars and Workshops conducted by various organizations.
- Students who secured Ranks in the End Semester Examinations are honored with Medals in the College Day to motivate their academic achievements.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	http://scteng.co.in/documents/IQAC/AQAR/A QAR2020-2021/2.2.1.pdf

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

Year	Number of Students	Number of Teachers
01/06/2020	623	140

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

### 2.3 - Teaching- Learning Process

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

```
Experiential learning, participative learning and problem
solving methodologies are well adopted by our college to ensure
the holistic development of students. Besides, it focuses on
the student-centric methods to develop latest skills,
knowledge, attitude, values to shape students' career.
```

#### Experiential Learning:

Employability Enhancement Courses have been offered by the institution in the curriculum under Regulations 2019 to enrich the experiential learning to the students. In addition the institution imparts the following experiential learning practices to expand the creativity and intellectual levels of the students:

- Mini project and Project works are carried out by the students to showcase their innovative skills.
- Internship provided to the students to get Hands on Training with latest technologies.
- For real time exposures, students are encouraged to participate in National and International conferences, seminars (webinars) and workshops.
- Value Added Courses are given by the experts to develop their expertise in their domain.
- Guest Lectures are given by eminent experts from industry and academics to support learning process.

#### Participative Learning:

Participative Learning includes attending seminars, group discussion, quizzes, participating in project contexts, etc. This Participative Learning inculcates the students to become independent, improve leadership skills and augment the creativity.

- National Level Technical Symposiums are conducted through online mode.
- Students are encouraged to participate in National/ International conferences, Symposiums, Seminars and Workshops.
- Proficiency in soft and communication skills through lab sessions.
- Technical Quizzes are organized for student participation at intra or inter college level.
- Students develop their technical skills through Seminar
   Presentation by presenting papers.
- In order to acquire participative learning, the students are given exposure for Presenting and publishing of papers in conferences and journals.
- College organizes Team activities through NSS, NCC and YRC. Various activities such as Tree Plantation, Blood donation, Swatchh Bharat and Health awareness camp.

## Problem-Solving Methodologies:

Faculty members encourage students to acquire and develop problem-solving skills. For this, each department organizes expert lectures on various topics, motivate students to join NPTEL courses, participate in various inter-college and intracollege technical activities and other competitions such as:

## ? Regular Assignments based on problems

? Mini Project development

### ? Case studies Discussion

File Description	Documents
Upload any additional information	<u>View File</u>
Link for additional Information	http://scteng.co.in/documents/IQAC/AQAR/A QAR2020-2021/2.3.1.pdf

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

Our College encourages, intensive use of ICT enabled tools including online resources for effective teaching and learning process. Our faculty members are using ICT enabled tools to enhance the quality of teaching-learning such as:

- General ICT tools are using by our faculty members such as Desktop and laptops, Projector, Digital cameras, Printer, Photocopier, tablets, Pen Drive, Ipads, Scanners, Microphones, interactive white board, DVDs and CDs.
- Google classroom is used to manage and post course related materials, Lab manuals, Records, Assignments, Answer scripts and evaluation etc.
- Virtual labs are used to conduct labs through simulation.
- For the effectiveness of teaching-learning process classes are taken with PPT
- Students' feedbacks are collected through Google forms.
- To teach mathematical subjects in online mode, teachers have used various online tools like- whiteboard in Microsoft teams, Jam board in Google meet, etc.
- Class Committee meetings, Seminar, Workshop and Symposium

are organized through online mode.

- Students are counseled with the help of Google Meet applications.
- Wide range of e-resources like DELNET, Digital library, ejournals, e-books, CD and DVD etc., by using library.
- Smart board is used by the faculty members effectively.
- Our Faculty members were trained for effective usage of ICT Tools. Training was given by Dr.M.Sakthivel, Associate Professor & Head, Department of Computer Science and Engineering on 30.07.2020 through online.

File Description	Documents
Provide link for webpage describing ICT enabled tools including online resources for effective teaching and learning process	http://scteng.co.in/documents/IQAC/AQAR/A QAR2020-2021/2.3.2.pdf
Upload any additional information	<u>View File</u>

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

### 2.3.3.1 - Number of mentors

140

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

#### 1. Academic Calendar:

The Dean (Academics) prepares the academic calendar every semester in advance. It consists of the list of working days, class committee meeting schedule, internal assessment test, model examination and Tentative End semester theory and practical examination dates, symposium, conferences, HoDs Meeting, IQAC meeting, holidays, festivals etc. Academic calendar provides the total effective working days available in a given semester. Then the time table Incharges prepares the time table according to the Academic Calendar which was approved by the Head of the Institution.

### 2. Teaching Plan:

Heads of the departments conduct meeting with their respective faculty members well in-advance of commencement of the semester course work, and allocate subjects. The subject in-charges concerned prepare Lecture plan for their respective subjects which are duly approved by the Head of the department. The number of hours in the teaching plan is framed depending on the credits of the course and made available to the students. This schedule is placed in the course file at the beginning of the semester. Effective implementation of the lesson and lecture schedules is monitored by the Head of the Department as well as academic auditors. Then the faculty members are asked to prepare unit notes and Lab manuals which are approved by Academic coordinator, HoD, Dean (Academics) and Principal. Due to pandemic situation, softcopies are posted in their respective Google Class room.

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

### 140

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

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

#### 16

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

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

_	_	_
7	n	n
	υ	υ

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

# 2.5 - Evaluation Process and Reforms

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

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

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

1

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

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

The College has been continuously carrying out of reforms in its examination procedure through integration of IT in all the procedures and processes of the examination system. The reforms have also been implemented in the continuous internal assessments modes and components. Examination procedure has been completely automated using IT software.

Positive impact of reforms on the examination procedures and processes including IT integration and continuous internal assessment on the examination management system.

Examination Procedures and IT Integration:

- Adopting semester patterns of examination with continuous evaluation system for all the departments.
- Digital evaluation system has been successfully implemented for UG, PG examinations with the help of eNova Software.
- Inclusion of project, assignment, seminar presentation etc. as components of evaluation.

The positive impact of the examination management system in the College as Follows:

E-governance has been successfully implemented in the College during the Academic Year 2020-2021. Online entry of Students data, attendance and internal assessment marks help to reduce the errors and saves lot of time.

Due to pandemic situation, the End Semester Examination Nov/Dec 2020 had been conducted through proctored online mode in MCQ format by using AON software.

The End Semester Examination Apr/May 2021 had been conducted through proctored online mode in descriptive format by using eNova software.

Proctored Online End Semester Examination had been conducted successfully and the Proctors were appointed by the Controller of Examinations of our college

Question papers were uploaded in Google Classrooms for

Continuous Internal Assessments and for End Semester Examinations by using Software. Before the commencement of examinations posting the Question papers 10 minutes prior which saves lot of stationery and physical movements and helps in avoiding leakage of question papers.

The students were instructed to upload the answer scripts within in one hour after the completion of the End semester Examinations and also asked to send the hard copy of the same to the college by next day.

Proctors were provided with login and password for the Monitoring and the External/Internal Examiners were also provided with login and password for digital evaluation.

Scheme of evaluation along with solutions are made available to the External/Internal examiners prior to the commencement of evaluation. Thus uniformity is maintained.

All the results of the examinations published through online.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional Information	http://scteng.co.in/documents/IQAC/AQAR/A QAR2020-2021/2.5.3.pdf

### 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

Sengunthar Engineering College follows the outcome-based education. The Program Outcomes (POs), Program Specific Outcomes (PSOs) are framed by each department with the consultation with all the faculty members and stakeholders.

Our college follows the Program Outcomes (POs) defined by National Board of Accreditation (NBA), New Delhi and are to be fulfilled by all the programs in higher education. The Course Outcomes (COs) for each subject is available in university syllabus and defined by concerned faculty member in consultation with HoD and Academic Coordinator. The POs, PSOs and COs are stated and displayed on websites communicated to all the faculty members, students and stakeholders.

File Description	Documents
Upload COs for all courses (exemplars from the Glossary)	<u>View File</u>
Upload any additional information	<u>View File</u>
Link for additional Information	http://scteng.co.in/documents/IQAC/AQAR/A QAR2020-2021/2.6.1.pdf

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

The curriculum of the program is designed with core and elective courses by considering Vision, Mission, Program Educational Objectives, Program Outcomes, Program Specific Outcomes and requirement of stakeholder.

Course Outcomes (CO) are statements that are framed in the view of what the students are expected to attain at the end of the course. Each course has 1-5 outcomes depending on its significance which are mapped to the Program Outcomes and Program Specific Outcomes.

#### Attainment of COs of the Course:

To attain the course outcome for the course, faculty members use direct assessment tools and indirect assessment tools as assessment methods.

The direct assessment method includes Continuous Internal Assessment Tests and Co-Curricular Components consists of assignments, Quiz and Presentation, etc. Indirect attainment can be determined from the course exit survey. The course exit survey permits receiving feedback from students on individual COs.

Attainment of Program Outcomes and Program Specific Outcomes:

A correlation is established between COs and POs and COs and PSOs on the scale of 1 to 3, 1 being low correlation, 2 being moderate correlation and 3 being high correlation. If the course outcomes are attained, the POs correlated to these course outcomes are also attained. The Assessment tools for Program Outcomes and Program Specific Outcomes are Direct and Indirect assessment methods. Direct assessment tools shows the knowledge and skills of the students based on their performance in seminars, assignments and examinations etc., which are based on the questions that relate to the specific Course Outcomes of the course. As Cos are mapped with POs and PSOs, the direct assessment tools used for COs can also be used for assessing POs and PSOs. Assessment of POs and PSOs can also be measured through indirect assessment tools. The course exit survey is taken at the end of the semester for each course.

The evaluation of attainment of POs and PSOs is obtained through the attainment of COs for all the courses.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional Information	http://scteng.co.in/documents/IQAC/AQAR/A QAR2020-2021/2.6.2.pdf

# 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

2	2	1

File Description	Documents
Upload list of Programmes and number of students appear for and passed in the final year examinations	<u>View File</u>
Upload any additional information	<u>View File</u>
Paste link for the annual report	http://scteng.co.in/documents/IQAC/AQAR/A QAR2020-2021/2.6.3.pdf

## 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

#### http://scteng.co.in/documents/IQAC/AQAR/AQAR2020-2021/2.7.1.pdf

#### **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

#### RESEARCH AND DEVELOPMENT CELL

#### RESEARCH POLICY

To promote the Research and Development in our institution a well drafted policy is scripted and followed. The research policy includes the promotion of research activity among the faculty members and involving the students to enhance the knowledge of recent developments and future hopes.

#### OBJECTIVES OF RESEARCH POLICY

The broad objective of the research policy is to provide guidelines for undertaking high impact and context specific applied research and to promote innovation and consultancy activities through development of Research Centre and Centre of excellence and also to motivate the students to take up the extension activities.

- To implement this policy the Institution has to make efforts to promote research activities in the department level, Staff member level and Student level.
- To increase the consultancy opportunities for faculties and students.
- To insist the students to take up extension activities by enriching their knowledge on serving the community and enhancing the social awareness.
- To establish an Advisory Committee and Research Ethics committee in the institution to enhance research activities.
- To create the platform for the faculty members and students to promote research activities.
- To encourage the faculty members for R&D activities in the area of their specialization in a group.
- To motivate staff members and students to publish technical papers for publishing in National International Conferences/Journals.

- To initiate, develop and coordinate research in newly emerging areas of science and engineering which includes all multi-disciplinary fields
- To assist the faculty members to take part in R&D activities like publishing journal, inculcating research innovative ideas for their professional growth
- To facilitate by motivating the faculty members in getting research grants from National and International agencies by submitting research projects.
- To inculcate relationships with reputed industries and agencies to know the requirement and expectation of industries.
- To provide seed money for the faculty members with the approval of the Governing body or the Management peer team.
- To introduce new value-added courses, training programs, workshops that promote students towards innovation and entrepreneurship activities.
- To activate Incubation centres and see that the products so emanate march ahead towards commercialization.
- To create an ecosystem for innovations, foster & encourage entrepreneurship including incubation center, and other initiatives for creation and transfer of knowledge
- To motivate the faculty members to share their knowledge and expertise for betterment of society and promote consultancy and project works in industry and other sectors
- To facilitate community-oriented research initiatives and transfer the research findings for the social innovation and economic development of the community/society
- To award the faculty members and students and concerned departments who are all actively pursuing research works and consultancy works
- To arouse the social consciousness of the students by providing them opportunities to work with people.
- To develop an awareness and knowledge of social realities to have concern for the well being of the community and engage in creative and constructive social action.
- To identify the needs and problems of the community through student's extension activities.
- To identify and establish Industry-Institute Interaction through MOUs for long relationships with the national and international academic institutions of higher learning and research institutions for widening the scope of research options and funding opportunities for the

faculties and students

#### RESEARCH PROMOTION POLICY

The institute provides necessary facilities and a promising environment to promote research, consultancy, innovation and intellectual capital.

- All the faculty members are encouraged to conduct research in the focused as well as interdisciplinary areas of research
- Full administrative support is provided to all faculty members students for filling of patents/other IPR related activities
- The SEED money for internal projects is provided by the institution to encourage initial research related activities for all potential faculties
- Faculty members with eligible qualification shall register for Ph.D. and are permitted to pursue Ph.D. under part time mode in the Anna University or any other reputed University
- Faculty member with Ph.D. qualification shall publish minimum one SCI paper per year and Faculty with Master's Degree qualification shall publish a minimum of two Scopus indexed papers per year
- The UG and PG projects are research focused and could be published either in the SCI/SCIE/SSCI or Scopus indexed journals
- The Institution supports to organize the high-level topical conferences/workshops/seminars for enhancing research activities.
- Annual awards to the faculty members for the excellence in research grants, publications, outside world interaction is provided by the Institution

Policy For Research AndConsultancy Project

The Institute gives reward to faculty members for the Research and Consultancy Project works carried out in the respective year. This practice is introduced by the Management to impart research culture and to motivate faculty towards identifying new innovations.

Terms & Conditions:

<ul> <li>The consultancy work will be carried out under the guidance of the Head of the institution and Research and development cell.</li> <li>Faculty should motivate the students towards participate in industrial consultancy projects.</li> </ul>	
RESEARCH COMMITTEE	
S. No.	
Category	
Name	
Designation	
1	
Chairperson	
Dr.C.Venkatesh	
Principal	
2	
Coordinator of the IQAC	
Dr.M.Selvakumar	
Assoc. Prof. & HOD/MECH	
3	
Deans	
Dr.B.Sujatha	
Dean (Academics)	
Dr.P.Rameshkumar	
Dean (Research & Development)	
Dr.K.L.Palanisamy	

Dean (Student Affairs)

Internal Members /HoDs

Mrs.N.Kiruthika

4

Asst. Prof. & HOD (i/c)/CIVIL

Dr.M.Sakthivel

Assoc. Prof. & HOD/CSE

Dr.C.Aarthi

Assoc. Prof. & HOD/ECE

Dr.K.Umadevi

Professor & HOD/EEE

CODE OF ETHICS IN ACADEMIC RESEARCH

OBJECTIVE

- To provide Good Practice in Academic Research
- To give Academic Freedom, Integrity and Responsibility
- To authenticate Institutional Responsibilities by providing training
- To illustrate Publication Practice and Authorship
- To explore Research Misconduct and Identifying Levels

The ethical committee is responsible for creating and promoting a transparent academic environment conducive to the application of research works.

S. No.

Category

Name

Designation

1

```
Chairperson
Dr.C.Venkatesh
Principal
2
Coordinator of the IQAC
Dr.M.Selvakumar
Assoc. Prof. & HOD/MECH
3
Dean
Dr.P.Rameshkumar
Dean (Research & Development)
4
Internal Members
Mr.M.SoundarRajan
Asst. Prof./CIVIL
Dr.G.Jayamurugan
Assoc. Prof./CSE
Mr.A.Rahul
Asst. Prof./ECE
Mrs.T.Gohila
Assoc. Prof./EEE
Mr.N.Thiru Senthil Adhiban
Asst. Prof./ MECH
```
#### Dr.K.Vignesh

#### Asst. Prof./PHY

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	http://scteng.co.in/documents/IQAC/AQAR/A QAR2020-2021/3.1.1.pdf
Any additional information	<u>View File</u>

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

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

#### 0.61

2

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

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

Page 145/228

16-02-2022 04:00:20

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

#### 3.2 - Resource Mobilization for Research

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

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

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

0

File Description	Documents	
Upload any additional information	<u>View File</u>	
Paste link for additional Information	http://scteng.co.in/documents/IQAC/AQAR/A QAR2020-2021/3.2.2.pdf	
List of research projects during the year	<u>View File</u>	

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

5

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

5

File Description	Documents	
Supporting document from Funding Agencies	<u>View File</u>	
Paste link to funding agencies' website	http://scteng.co.in/documents/IQAC/AQAR/A QAR2020-2021/3.2.4.pdf	
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.

Sengunthar Engineering college has a well-established and active Research and Development Cell, with members drawn from different departments. The Cell encourages students and faculty members to carry out innovative research aimed at patent registrations and arrange lectures / workshops on IPR. Our college has encouraged student level, faculty members level and department level programs to enhance research activities. The Research and Development Cell constituted Research Committee and Ethics Committee to enhance the research culture in the Institution

The Institution has well-equipped laboratories to cater to the needs of students and to nurture them towards research and developmental activities. The R & D Cell organizes review meeting to ensure that faculty members submit research proposals to various government organizations for getting sponsored projects. The research committees under the R&D cell scrutinize and select projects from all departments by awarding SEED money to promote projects at the entrylevel. The Ethics Committee reviews all publications of conference and journal for plagiarism. Various consultancy activities are promoted by the institution for promising future of the students. Students are encouraged to submit the new innovative projects and better projects are selected and funded by the agencies.

Our faculty members have published several research papers in UGC/ Web of Science indexed journals in the past years. The Institution has an ecosystem for innovations including Entrepreneur Development Cell and Incubation Cell for helping successful engineering graduates to float startup ventures and technology transfer. This Center aims at providing training to the interested graduates in our college, rural youth entrepreneurs and women self-help groups. The innovative projects of the students have led to Technology Transfer to government and corporate sectors.IIC which works with mentor mentee concept enhances the innovative idea culture in the Institution by conducting innovative contests to develop the research work. The Entrepreneur Development cell guides the students to towards employability growth by conducting several motivational programs and employability training in various methods.

Several seminars and workshops, innovative contests are being organized for students and faculty members from various departments every year to inculcate their interest towards the research activities.

Research Committee

S. No.

Category

Name

Designation

1

Chairperson

Dr.C.Venkatesh

Principal

```
2
Coordinator of the IQAC
Dr.M.Selvakumar
Assoc. Prof. & HOD/MECH
3
Deans
Dr.B.Sujatha
Dean (Academics)
Dr.P.Rameshkumar
Dean (Research & Development)
Dr.K.L.Palanisamy
Dean (Student Affairs)
4
Internal Members /HoDs
Mrs.N.Kiruthika
Asst. Prof. & HOD (i/c)/CIVIL
Dr.M.Sakthivel
Assoc. Prof. & HOD/CSE
Dr.C.Aarthi
Assoc. Prof. & HOD/ECE
Dr.K.Umadevi
Professor & HOD/EEE
Ethics Committee
```

```
S. No.
Category
Name
Designation
1
Chairperson
Dr.C.Venkatesh
Principal
2
Coordinator of the IQAC
Dr.M.Selvakumar
Assoc. Prof. & HOD/MECH
3
Dean
Dr.P.Rameshkumar
Dean (Research & Development)
4
Internal Members
Mr.M.Soundar Rajan
Asst. Prof./CIVIL
Dr.G.Jayamurugan
Assoc. Prof./CSE
Mr.A.Rahul
```

Asst.	Prof.	/ECE
-------	-------	------

Mrs.T.Gohila

Assoc. Prof./EEE

Mr.N.Thiru Senthil Adhiban

Asst. Prof./ MECH

Dr.K.Vignesh

Asst. Prof./PHY

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	http://scteng.co.in/documents/IQAC/AQAR/A QAR2020-2021/3.3.1.pdf

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

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

#### **3.4 - Research Publications and Awards**

3.4.1 - The Institution ensures	A. All of the above
implementation of its Code of Ethics for	
Research uploaded in the website through	
the following: Research Advisory	
Committee Ethics Committee Inclusion of	
<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	<u>View File</u>

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

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

#### 10

File Description	Documents
URL to the research page on HEI website	http://scteng.co.in/documents/IQAC/AQAR/A QAR2020-2021/3.4.2.pdf
List of PhD scholars and details like name of the guide, title of thesis, and year of registration	<u>View File</u>
Any additional information	<u>View File</u>

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

#### 78

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

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

45

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	http://scteng.co.in/documents/IQAC/AQAR/A QAR2020-2021/3.4.4.pdf

**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

119

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

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

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

12

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

#### 3.5 - Consultancy

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

0

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

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

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	<u>View File</u>
List of facilities and staff available for undertaking consultancy	<u>View File</u>
Any additional information	<u>View File</u>

#### **3.6 - Extension Activities**

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

The extension activities in our college make the students to understand the community in which they will work and identify the needs and problems of community and involve them in problem solving. Extension Activities aims at enabling our students/volunteers to develop social responsibility and learning by doing. Service attitude is essential for any professional to flourish in his/her job. Our extension activities have multiple dimensions such as National Service Scheme, National Cadet Corps, Youth Red Cross, Red Ribbon Club, etc. The professional as well as life skill development of engineering graduates is balanced through extension activities. NSS activity makes the students confident, develop leadership skills, and gain knowledge about different people from different walks of life. Students also learn other skills that help them lead a better life in various situations. NSS offers a wonderful opportunity to use one's spare time to empathize and help the poor and the under privileged fellow countrymen living in slums and villages. It creates the volunteers with an opportunity to train themselves as the future leaders and decision makers of the country. It provides training to equip the volunteers with the minimum necessary skills to carry out the programme.

The NSS units of the institution consist of 200 (unit I -100 +Unit II-100) socially sensitive students with a deep sense of service participating in the activities of club with verve. With the unswerving support of the Management, the NSS Units further enhances the social spirit through Regular Activities and Special Camp. In addition, many tasks are carried out along with Human Resource Development, Govt. of India scheme Unnat Bharat Abhiyan (UBA). Students used to go to the nearby villages to involve themselves in the field work thereby knowing the real conditions of the villagers.

Our college is committed towards social and national responsibilities; bearing this in mind we have raised the NCC Air Force in the year 2019 under 5 TN Air Sqn Tech NCC Salem on 18.09.2019 with 51 cadets to commit themselves in various training activities and exposure to the wide range of activities like Social Services like Swach Bharat Abhiyan, Azad Ka Amrit Mahotsav and programs conducted by Ministry of India and adventurous training like Mountaineering Trekking, Weapon Training, Vayu Sainik Camp, Air Force Attachment Camp and make them to take part in Republic Day Camp one of the dream moment of every Cadets life.Our college is equipped with the infrastructure facility for FiringRange withwell-structured Parade Grounds. The NCC programme provides ample opportunities to the cadets by take part in firing competition, drill practices, personality development camps like Basic leadership Camp and Annual leadership Camp, Ek Bharat shreshthabharat Camp which makes them explore about the different cultures and their diversity, comradeship, character, sportsmanship and voluntary service programmes which makes them to get in Government sectors easily with the motto of Unity and Discipline for serving the nation.

We believe that an individual will come to possess an adoring personality only by involving himself / herself in activities like NCC, NSS etc.

The RRC of our college is encouraged to learn about safe and healthy lifestyles. The RRC promotes access to information on healthy life and voluntary blood donation. They create and provide opportunity to the zeal of volunteerism among youth to contribute towards the control and prevention of most hazard deceases

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	http://scteng.co.in/documents/IQAC/AQAR/A QAR2020-2021/3.6.1.pdf

**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

#### 0

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

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

6

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

#### 3.6.4 - Number of students participating in extension activities listed in 3.6.3 during the year 87 **File Description** Documents Reports of the events View File View File Any additional information 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 72 **File Description** Documents Copies of documents View File highlighting collaboration Any additional information View File 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) 4 **File Description** Documents e-copies of the MoUs with View File institution/ industry/ corporate house Details of functional MoUs View File with institutions of national, international importance, other institutions etc. during the year Any additional information View File **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.

Academic and non-academic infrastructure is properly

categorized

Academic infrastructure:

The College encompasses a well maintained lush green campus spread over 60 acres of land ensuring adequate availability and optimal utilization of physical infrastructure for teaching learning activities.

The college has enough classrooms with natural light, podiums, seating facilities, a teacher's chair and table, and bulletin boards in all disciplines. Blackboards and bulletin boards are provided in all classes. Dustbins are placed in all classrooms.Several Xerox machines are located around the institution.

Seminar halls are regularly used for conducting national / international seminars at the college.The students are promoted for active involvement in paper presentations, group discussions, etc. The College has multiple seminar halls which are equipped with an LCD projector, an audio system, a podium, and seating for 300 people, are often utilized for various events.

All the laboratories are established as per Anna University norms.Laboratories are developed specifically to fulfill the needs of students from various departments. There are certified demonstrators and a lab technician in each lab. There are wellequipped laboratories with all contemporary instruments, as well as a set of Do's and Don'ts posted within the lab.Our department laboratories are utilized by students and faculty members for learning purposes, project work, research purposes and entrepreneurship. The timetable committee, by properly allocating rooms and laboratories so that there are no overlaps.

Non Academic infrastructure:

We offer a spacious playground for volleyball, badminton, basketball, and cricket practices, as well as a well-equipped gym with all of the necessary equipment for indoor activities.Our student's sports achievement details are also attached.Our institution has an emergency vehicle that is used to transport students to their hospital if they get ill after receiving early treatment such as rest.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	http://scteng.co.in/documents/IQAC/AQAR/A QAR2020-2021/4.1.1.pdf

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

The Institute, with its Core Courses and the continuous evaluation scheme, integrates sports and extra-curricular activities as essential components. This is done not only for participation but also for assessment of students.

It has adequate facilities for sports, games and cultural activities. The total area of sports and games fields is 12 acres. Our College holds well exposed teams in Football, Basket ball, Cricket, Kabaddi, Ball Badminton, Shuttle badminton, Table Tennis, Boxing, Hockey, Volleyball, Take-Won-Do, Judo and Athletics.

All faculties have well-equipped assembly halls for organizing annual functions and cultural events. Facilities for outdoor and indoor sports and games that include badminton, volley ball, basket ball, carom, table tennis and chess, gymnasium and cultural activities also exist in the Girls and Boys Hostels. Our student's sports achievement details are also attached.

The institute encourages students to participate in sports & games outside the campus. Transport is provided to students to participate in events outside the campus. The constant support from the management towards sports and games considerably enhances the health of the students and relieving the tension. In our effort we won number of tournaments.

Intra-faculty and inter-faculty games and sports competitions are organized regularly every year for students. Students are specially trained for participation in Zonal and Inter-Zonal National Youth Festivals competitions organized by the Association of Indian Universities, the National Youth Parliament competition and other cultural and sports events outside the campus.

Some of the faculty members serve as instructors at the Day

albagh Yoga Centre. Special classes on self-defense are organized specially for female students.

National Independence Day and Republic Day are celebrated in the Institute by unfurling the national flag followed by a guard of honor of the Chief Guest by NCC students, an impressive march past of students of all faculties on the beats of the students' band and organization of athletic events. The best marching contingent is judged by a panel of army veterans.

Students present cultural programmes on the Convocation Day and in National and International Conferences organized by the Institute. Our institution has an emergency vehicle that is used to transport students to their hospital if they get ill after receiving early treatment such as rest.

File Description	Documents
Geotagged pictures	<u>View File</u>
Upload any additional information	<u>View File</u>
Paste link for additional information	http://scteng.co.in/documents/IQAC/AQAR/A QAR2020-2021/4.1.2.pdf

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

1	2
4	. 4

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)**

259.95873

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

#### 4.2 - Library as a Learning Resource

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

Sengunthar engineering college was established in 2001 and it is an autonomous engineering college affiliated by Anna University, Chennai. The college has an separate excellent integrated library surrounded by an area of 1526.954 sq.ft with two floors. The library is the repository of knowledge and information, as well as the nerve centre of the college's teaching and learning operations.

In Ground floor, there are separate reading hall with Journals and magazine section, reprography section and digital library section. In First floor, there are department wise text books and reference books (UG & PG) with vast reading hall and Reference section. We have a central library at our campus, as well as a group discussion area with capacity for 25 people.

The Second floor has an separate Group Discussion hall, IIT Remote Centre Bombay, General aptitude books, Book Bank Books and Back Volumes of the journals. The college library contains a sufficient amount of volumes to cover all of the college's subjects.

Further our library includes more than 37904 books, 108 journals and 17 magazines, 459 CD's , 1287 back volumes, 1230 projects and NPTEL 6TB hardware and also online access in digital library.

Moreover, it has an integrated library Management software, Campes iLIb, Software 6.0.8. version established in the year 2010. The usage of the above mentioned software are Gate entry, data entry, Book issue and return, renewal of the books, journals entries etc. The automated system enables book purchase order, receiving and Accessing , cataloguing in the form of Dewey Decimal Classification. OPAC (Online Public Access Catalogue) service is provided for the users to search the collection of the books, titles, authors, publishers and particular editions, etc. The users have to swipe the ID card while entering into the library and the Circulation of books issue and return, Stock verification, etc are maintaining by barcode technology. Departmental libraries are maintained by some departments. Books on general themes are also available for students' further growth. Computer lab with internet access and a printer is provided. Students are given a library card to use at their leisure.

The library offers a property counter where students may leave their bags and valuables.

Library usage by students is tracked both digitally and manually.

Uses of Digital Library:

1. The digital library having 60 computers with remote access facility exclusively for students.

2. It has various e-books, IEEE journals, DELNET, NPTEL audios and videos, previous year question bank and various online materials.

3. It provides the service of photocopy, scanning , Printing, etc for the students.

4. The central library is completely covered under the Wi-Fi network.

5.All Faculty members and students of our institution are registered in NDLI.

6. Book bank facilities for both UG & PG are provided for minority students.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	http://scteng.co.in/documents/IQAC/AQAR/A QAR2020-2021/4.2.1.pdf

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

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

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

#### 1.74886

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

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

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

#### 25

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

#### **4.3 - IT Infrastructure**

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

Sengunthar Engineering College maintains certain policies with regard to the use and security of its computer systems,

networks, and information resources. All users of these facilities, including technology developers, end users, and resource administrators, are expected to be familiar with these policies and the consequences of violation.

The college has a comprehensive IT infrastructure, service, security, and administration system that is available to all departments.There is a 50mbps backbone connecting all PCs to the LAN. Internet access is available at all PCs.IT infrastructure is upgraded on a need-to- basis.Efforts are made to maintain previously purchased computers and other equipment.

The Information Technology Policy Committee, guides, directs, and approves the establishment and implementation of policies, guidelines, and standards pertaining to the use of IT within Sengunthar Engineering College.

The university is upgrading its IT infrastructure, and software for office automation, admissions, library, examinations, and other purposes is being implemented. Students are encouraged to use ICT tools to provide seminar speeches. Creation of committee regarding IT policy is under progress. The institute has always given priority for up-gradation of IT facilities. Regular updating is done in facilities at institute level as well as department level. The description of the same is provided below.

Wi-Fi has been installed around the campus to allow students and faculty members to easily access the internet.Due to rapid technological advancements, computers are upgraded on an almost yearly basis.On working days, all computer laboratories are open from 9 a.m. to 5 p.m., with the ability to extend the hours if necessary. If equipment is required, we submit the request six months in advance.

Remote Centre for IIT, Bombay: The audio-visual setup enables the institute to often arrange workshops conducted by IITs via video conferencing. The equipment ofaudio visualsetup was upgraded in 2018.

Upgrading Policy:Computers in the institute are upgraded with new Hard Drive and RAM with a size of 4GB and 8GB.

Identity: System Identity is given in the form of IP Addresses and unique number is assigned to each and every computer in laboratories and faculty rooms.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	http://scteng.co.in/documents/IQAC/AQAR/A QAR2020-2021/4.3.1.pdf

#### 4.3.2 - Student - Computer ratio

Number of Students		Number of Computers		
2010		804		
File Description	Documents			
Upload any additional information		<u>View File</u>		
4.3.3 - Bandwidth of internet connection in the Institution and the number of students on campus				
File Description	Documents			
Details of bandwidth available in the Institution		<u>View File</u>		
Upload any additional information	<u>View File</u>			
4.3.4 - Institution has facilities for e-content development: Facilities available for e-content development Media Centre Audio-Visual Centre Lecture Capturing System (LCS) Mixing equipments and software for editing		A. All four of the above		
File Description	Documents			
Upload any additional information	View File http://scteng.co.in/documents/IQAC/AQAR/A QAR2020-2021/4.3.4.pdf			
Paste link for additional information				
List of facilities for e-content	<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)

#### 255.82377

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

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

The institute has well defined system of maintenance of its academic, physical and support facilities like laboratory, library, sports, computers, class rooms etc. The maintenance committee headed by The Principal and convened Administrative officer who intern monitor the work of supervisor in next level. Maintenance supervisor and his team are involved in the maintenance of overall infrastructure facilities. This team looks after regular maintenance and repair of furniture, masonry, plaster, painting, plumbing, housekeeping, gardening, transport, RO plant, telecom and IT services.

Maintenance usually comes under two types i.e. schedule maintenance and preventive maintenance. Regular maintenance of students and faculty are maintained by log book format.Formation of maintenance committee also in progress. A team of professional personnel, including carpenters, electricians, masons, construction workers, plumbers, and painters, maintains the infrastructure.

This team is usually on site or easily available on call.The phone numbers are posted in the office with the chief peon, who hears complaints and oversees the maintenance work.Calibration and precise measurements for equipment/instruments are performed on a near-daily basis.Staff members are given responsibilities to help the lab assistants ensure that the instruments are properly maintained and calibrated on a daily basis.

• Regular cleaning of class rooms, floor, laboratories, library and rest rooms are done by housekeeping staff.

- Adequate staffs are employed to meticulously maintain cleanliness of infrastructure to provide a congenial learning environment.
- Dust bins are placed in every class room.
- The campus maintenance is monitored through surveillance Cameras the green cover of the campus is well maintained.
- The college has good team of electricians & plumbers who maintain RO system, electrical and water facilities in college and hostel.
- The college is power backup with generator.

Maintenance of Laboratory equipment

Preventive maintenance and breakdown maintenance procedures are followed for all laboratories. The laboratory/workshop equipment and machinery are maintained by well-trained technical staff. Periodical check-up equipment is carried out as per laboratory schedule.

The minor repair/service will be done by the technical staff with lab in-charges. The major service requests will be forwarded to Principal through Head of the department. The maintenance department, find for suitable service personal for rectification. Annually stock verification of all laboratories and other facilities are carried out. The computer laboratories are supported with power backup system UPS. A weekly status of hardware and software are maintained in register.

Library maintenance

Entry and exit register is maintained to ensure effective utilization of library.

The requirement of the books are collected by librarian from department as per the demand fromstudents and faculty.

The books are cleaned at periodical intervals to avoid infections and dust.

Electrical maintenance

The generator, lighting, electrical, air conditioners, solar panel, and RO system maintenance is carried out by in-house electricians.

Transport maintenance:

The college has a fleet of buses which is provided to students and staff.Buses are regularly cleaned. Vehicles are periodically greased for smooth running.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	http://scteng.co.in/documents/IQAC/AQAR/A QAR2020-2021/4.4.2.pdf

#### 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

#### 572

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

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

#### 585

File Description	Documents	
Upload any additional information		<u>View File</u>
Institutional data in prescribed format		<u>View File</u>
5.1.3 - The following Capacity and Skill Enhancement activity organised for improving stude capabilities Soft Skills Langua Communication Skills Life Sk Physical fitness, Health and H Awareness of Trends in Techn	ties are ents' age and kills (Yoga, lygiene)	A. All of the above

File Description	Documents
Link to Institutional website	http://scteng.co.in/documents/IQAC/AQAR/A OAR2020-2021/5.1.3.pdf
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

4	9	7	

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 sta grievances, including sexual h and ragging: Implementation of statutory/regulatory bodies awareness and implementatio with zero tolerance Mechanism submission of online/offline sta grievances Timely redressal of through appropriate committed	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	<u>View File</u>
Details of student grievances including sexual harassment and ragging cases	<u>View File</u>
Upload any additional information	<u>View File</u>

#### 5.2 - Student Progression

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

156

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

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

8

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

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

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

0

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

#### **5.3 - Student Participation and Activities**

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

5

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

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

- College creates a platform for the active participation of the students in the various academic administrative bodies.
- This empowers the students in gaining various skills apart from leadership and Headship qualities. Out of 43 Committees/Cells/Groups etc in the institution, students are actively involved as a key representative in 20 Cells, like Women Empowerment Cell, Green Club, Entrepreneurship Development Cell, Creativity and Innovation Cell, Toastmasters Club, Center for Excellence, Texas Innovation Lab, Tamil Mandram, Povrnami Kavirangam, Womens Forum, Blood Donors Club, NSS, YRC, RRC, Eco Club, Class Committee, Activity Based Learning Cell etc.
- Each Cell has a separate mode of selection and function based on the need and importance of the Cell/Committee/Forum.

Few key activities of the Students in the Committees are:

- The student members bring forward the views and suggestions of the entire class with respect to the faculty, subjects, syllabus and other things related to the class.
- The composition of student members is of two topper, two average and two slow learner (the one who has more integrity with other students) of each section are nominated as class representatives, for all the sections from First Year to Final Year.
- The Class Committee helps students to share ideas, interests, and concerns with lecturers and principal. They often also help raise funds for wide activities, including social events, community projects, helping people in need and college reform.
- Various programs like paper presentations, workshops and seminars are organized by these bodies every year.
- Apart from that we had formed Library committee for

improving the reading habits of the students, Cultural Committee for students Extra Curricular Skill Development, for Discipline, Anti Ragging Committee, for Physical Fitness, Sports Committee.

• The funding for various activities of the internal college bodies is provided by the College Management.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	http://scteng.co.in/documents/IQAC/AQAR/A QAR2020-2021/5.3.2.pdf

#### 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	<u>View File</u>

#### 5.4 - Alumni Engagement

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

- Sengunthar Engineering College has a registered Alumni Association for building strong bond between alumni and present students. The alumni give support to the students through interaction, financial funding, guidance and placement. This was registered under under theTamilnaduSocieties & RegistrationAct1975 (CERTIFICATE OF REGISTRATION OF SOCIETIES : Sl.No.: 119/2010). The mission of the Alumni Association is to foster a mutually beneficial relationship between the Institute and its alumni.
- Yearly a General Body Meeting is organized during the Graduation Day and nominates the Officer Bearers for the Association. Apart from this a regular visit by the Alumni for discussion with the Students about the present

industrial scenario and also utilize them for the Placement opportunities of the students.

- To encourage and promote close relations between the Institution and its alumni and among the alumni themselves.
- To promote and encourage friendly relations between all members of the alumni body, an interest in the affairs and well-being of the Institution.
- To provide and disseminate information regarding their Alma Matter, its graduates, Faculties and students, to the alumni.
- To initiate and develop programs for the benefit of the alumni.
- To assist and supporting the efforts of the Institution in obtaining funds for development.
- To serve as a forum through which alumni may support and advance the pursuit of academic excellence at the Institution.
- To guide and assist alumni who have recently completed their courses to obtain employment and engage in productive pursuits useful to society.
- To organize and co-ordinate reunion activities of the Alumni and let the Alumni acknowledge their gratitude to their Alma Matter.
- To collect, publish and distribute such information as may be useful to the alumni and their Alma Mater.
- Alumni have donated funds to assist the Poor & Merit students of the Institution.
- Alumni are included as members in the Board of studies of all departments. They are invited for meetings at the college and they interact with their teachers and express their suggestions on curriculum revision.
- A Few Alumni gave Guest lecturers to the existing students on some contemporary technological developments and career guiding focuses.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional Information	http://scteng.co.in/documents/IQAC/AQAR/A QAR2020-2021/5.4.1.pdf

5.4.2 - Alumni's financial contribution during the year		E. <2 Lakhs		
File Description	Documents			
Upload any additional information	<u>View File</u>			
GOVERNANCE, LEADERSHIP AND MANAGEMENT				
6.1 - Institutional Vision and Leadership				
6.1.1 - The governance of the institution is reflective of an effective leadership in tune with the vision and mission of the Institution				
Our Governing body is the vision and mission		ective and the main focus is on astitution.		
Vision:				
To produce talented engineers and technicians to meet the challenge of the modern world to train the young People to understand human values.				
Mission:				
To offer professional education and bring out the hidden talents from the rural based students as our nation depends on rural mass.				
To ensure that the Institution is efficiently managed and administered the college follows a time tested and successfulas well as a competent secretarial constitution comprising of:				
<ul> <li>The Management</li> <li>Principal</li> <li>Dean(s)</li> <li>Director-CR</li> <li>Heads of the Department</li> <li>Faculty Members</li> </ul>				
The management holds the Executive Committee Meeting with the Principal to review the academic administration, research and development, and/or any other agenda planned for the growth of the institution. Major policy decisions are taken in these meetings.				

The Principal conducts regular monthly meetings with all the Heads of the departments and Dean(s) regarding academic activities, following up on the academic calendar, students' progress, placement and training, research and extension activities, industry interaction, consultancy assignments, alumni interaction etc.

The Principal ensures that in all these reviews the decisions taken in the Executive Committee Meetings are effectively enforced. The Principal meet the members of the faculty of every department once in a semester to convey the management's viewpoint and also to motivate the faculty members to continue putting in efforts to deliver improved contributions thus ensuring overall good performance of the Institution.

The Heads of the departments regularly conduct departmental meetings with all the members of their faculty to ensure that the various committees that have been constituted are functioning effectively to ensure maintenance as well as continuous improvement in the quality of the teaching-learning process.

The Institution focuses on the following areas of Governance.

Teaching and Learning:

All the faculties of the institution are encouraged to train in the modern and innovative methods of teaching and motivated to attend various programmes related to pedagogy. The most commonly used teaching and learning methods at the institution are lecture, PowerPoint Presentation, Seminar, demonstration, Hands on practice, peer teaching, team teaching, internship, projects, surveys, industrial visits, group discussion, quiz, games and role play.

Examination and Evaluation:

The Office of the Controller of Examinations executed for processing the Examinations and Evaluation process. Continuous Internal Assessments (Three Internal Assessments) and End Semester (One End Semester) Examinations are conducted to evaluate the progress of the students.

End semester Examinations for theory, practical and Lab embedded theory courses The Question paper is being prepared by both External and Internal faculty. Evaluation of answer scripts is done by both external and internal faculty members in the ratio of 2:1. Further process includes conduct of examinations, publishing results, revaluation/photocopy of all UG and PG programmes in both semesters Odd and Even.

#### Research and Development:

The college has a separate Research and Development Cell which takes up the activities related to Research and Innovation. The committee is headed by the Dean-RD. All the faculty members have been encouraged to apply Research Proposals to various funding agencies like AICTE, DST, UGC, CSIR, ICSSR, etc.

Planning and Development: The college has a separate Planning and Development Cell which take up the initiatives and activities related to renovation of building and other infrastructure of the institution. The committee is headed by the Dean-P&D.

Library, ICT and Physical Infrastructure / Instrumentation: The college boast a well-stocked and semi- automated central library with college and Department wise division to ensure easy, quick and efficient access to desired data. NPTEL (National Programme on Technology Enhanced Learning) web courses and video courses are being used by staff and students to enhance their skills. The college is an institutional member of DELNET for sharing resources with other libraries to enhance teaching - learning process.

Human Resource Management: The management assesses adequate human power requirements. Recruitment and Selection of the faculty members are based on the guidelines provided by AICTE, New Delhi and Anna University, Chennai. Regular feedback and suggestions from the faculty members are obtained for the development of Human Resource Management.

Industry Interaction / Collaboration: Various MoU's are signed for the academic development and students' professional growth. Industry Interaction is integrated for all UG and PG Programmes. Membership with EEDISSIA (Erode District Small Industries Association), CII (Confederation of Indian Industry) and MoUs signed with leading companies are beneficial to the students' community.

With exchange of expertise and a proper monitoring system is evaluated to measure through IIPC. Guest lecturers are being conducted by the Industrial Experts. The Effective function of Entrepreneurship Development Cell is organizing various Programmes and Exhibitions.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional Information	http://scteng.co.in/documents/IQAC/AQAR/A QAR2020-2021/6.1.1.pdf

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

#### Motivation

All the Head of the Departments has the responsibility of motivation and mobilization. Staff Members and Students are motivated to give their opinion, suggestion and feedback in all aspects of administration and academics.

#### Mechanism

The decision-making process in SEC is achieved by following participative mechanisms by involving various members through the following statutory bodies: Governing Body - College management - Academic Council - Administrative Council -Department HoDs and Coordinators - Departmental Board of Studies.

#### Outcomes

Decentralization permits the students and faculties to be greater responsible, responsive, touchy and proactive to work out their personal discretion for making plans and execution in a participatory and democratic environment.

#### Future Plans

SEC is working to set the benchmark for every activity to ensure quality administration in future through intensive efforts of all stakeholders.

Decentralization:

The Institute supports a trend of decentralized governance systems with proper well defined inter-relationships. The management of the institute has decentralized functioning through governing body (GB), Secretary and Correspondent, Principal, Deans and HODs.

Regular meetings of these committees are held for the effective and smooth functioning of the institute. Administrative structure under which all the activities of the institute are carried out.

Institute level - The management of the institute is directed by the Governing Body, whose members are appointed in accordance with the guidelines provided by the Anna University, Chennai and AICTE.

All the main decisions related to the institute are taken by the Principal in consultations with the Head of departments. Principal is the academic and administrative head of the Institute and the Member of the Governing Body. Some financial power is given to the principal for the development of the institution.

Department level - The Department Heads are responsible for looking at day-to-day administration of the department and report to the Principal. In addition, any institute staff member can give suggestions and ideas for improvement. Students also participate through different formal and informal feedback mechanisms. Management is approachable and accepts all suggestions.

Participative management: The institute always promotes the culture of participative management by involving staff and students in various activities. All decisions of the institution are governed by management. The students and faculties are allowed to express themselves for any suggestions to improve the excellence in any aspect of the Institute. We have been given opportunities to non-academic staff members whenever the need arises.

The Principal, Dean Academics, HODs and staff members are involved to defining the policies and procedures, making guidelines and rules/regulations pertaining to admission, placement, discipline, grievance, counseling, training & development, and library services etc., Staff members are also involved in deciding academic activities and examinations to be conducted in institute.

The faculty members participate in sharing the knowledge by discussing the latest trends/technology during faculty meetings. Some Staff members are involved in preparation of the annual budget of the department and institute.

The Principal of the institution is a member of the GB. The GB gives suggestions and monitors the procurement, introduction of new programs and welfare activities. All the staff members actively participate in implementing the policies, procedures, and framework designed by the management in order to maintain and achieve the quality standards and achieve the vision and mission of the institution. Non -Teaching and office staff is involved in executing day to day support services from students and faculties.

Case study : -Academic Monitoring Committee (AMC).

Role: Academic Monitoring Committee (AMC) is (college level) responsible for supervising, modulating and executing the various academic actions & guidelines. It is purposely formed for continuous & reliable conduction of academic work all through the institute.

Committee Member Hierarchy: AMC is en route by Principal and monitored by Dean - Academic of the institute. Other members of the committee are Head of Departments, Department wise academic Coordinators and Subject staff, class advisors, exam coordinators and supporting staff. Activities conducted by AMC: Teaching learning process monitors by AMC. It prepares the academic calendar of the institute which is a mirror image of University's academic calendar that includes curricular, cocurricular and extracurricular activities. The Academic Calendar is intensively planned and prepared in advance by the Dean of Academics and ensures the proper implementation of the academic calendar. The Dean of Academics is responsible for confirmation and observation of academic activities.

Internal Assessment test and result analysis meeting is conducted. Extra care is given for poor/weak students.

Result: The AMC conducts the meeting periodically for the discussion of issues and challenges for the development aspects of the institute. through proper channels i.e. through Academic coordinators, student feedback system and through other various

committee meetings. Institute encourages teachers, students, parents, corporate resource persons, employers, alumni, staff, class coordinators and class representatives to share their ideas, opinions, suggestions which are in line with our institute's Vision and Mission Statements are considered by the AMC for decision making.

The Institution promotes a culture of participative management at all levels right from the students up to the faculty members. The College promotes participative management. Ideas pertaining to academic goals, organizational progression and better campus life are collected from all stakeholders to promote efficient functioning of the College. The staff and other stakeholders help in infusing a positive attitude that leads to increased efficiency, improved communication, heightened morale, motivation and job satisfaction. Believing in decentralization, the Management takes policy decisions, finance, infrastructure etc. with the help of members of the College Committee.

The Governing Body delegates all the academic decisions based on the policy to the various monitoring committees headed by the Principal in order to accomplish the vision and mission of the institution. Faculty members are given representation in various committees / cells and allowed to conduct various programs to exhibit the abilities of both students and faculty members.

The needed skills of Life Skills, Employability Enhancement Courses are incorporated in the new curriculum in order to encourage the students to develop the skills need of the hour. Students are empowered to play an active role as coordinator for curricular, co-curricular and extracurricular activities. Our Institution's focuses on advanced research in the areas of science, engineering and technology.

The student representatives are members of the following committees.

- Class Committee
- Anti- Ragging Committee
- Technical Associations and Clubs
- Professional Society Chapters
- Sports Committee

And the members of faculty are part of the following committee
```
• Governing Body, Academic Council, Board of Studies and
     Finance Committee
   • Academic Monitoring Committee
   • Planning and Development Committee
     Internal Exam Cell
   0
   • Anti - Ragging Committee
   • Anti - Ragging Squad
     Sexual Harassment Committee
   0
   • Grievance Redressal committee
   • Professional Society Chapters
The involvement contributes towards improvement in academic,
ragging free campus, empowerment of women.
Following are the other activities involved in the institution:

    Research Promotional activities

   • Remote centre
   • National Nodal centre for Cyber Safety and Security
      Standards
   • Planning and development Cell

    Institute Industry partnership Cell

   • Entrepreneurship Development Cell
     Campus Connect
   •
   • Women Empowerment Cell
   • Smart India Hackathon
List of Members of Governing Body
Sl. No.
Members as per UGC Norms
Name of the Members
1
Chairperson
ThiruJansons T.S. Natarajan
President, Sengunthar Charitable Trust
Tiruchengode
```

2

```
Management Member
Prof. A. Baladhandapani
Secretary and Correspondent
Sengunthar Charitable Trust
Tiruchengode
3
Management Member
Mr. M.K. Dhanasekaran
Treasurer, Sengunthar Charitable Trust
Tiruchengode
4
Management Member
Mr. T. Shanmugasundaram
Joint Secretary, Sengunthar Charitable Trust
Tiruchengode
5
Management Member
Er. A.B. Madhan
CEO,
Sengunthar Institutions
6
Management Member
Mr. T. AravindThirunavukkarasu
```

```
Director Corporate Relations and Training
Sengunthar Institutions
7
UGC Nominee
Prof. M. R. Bhagwan Singh
Professor of Mech. Engg. (Retd.)
B.M.S College of Engineering
Bull Temple Road, Basavangudi
Benguluru
8
State Government Nominee
Prof. M. Deepak Kumar
Assistant Professor
Department of Metallurgical Engineering
Government College of Engineering
Salem
9
University Nominee
Dr. S. Kalaiselvam
Professor
Department of Applied Science and Technology
AC Tech Campus
Anna University
```

## Chennai

## 10

Industrialist

Dr.R.Venkatesan

Group Head & Scientist G Ocean Observation Systems National Institute of Ocean Technology

Chennai

11

Academician

Dr. M. Umapathy

Professor

Department of Instrumentation and Control Engineering

National Institute of Technology

Tiruchirapalli

12

Teachers of the College

Dr. K.L. Palanisamy

Dean (Student Affairs) cum Professor and Head

Department of Science and Humanities

13

Teachers of the College

Dr. B. Sujatha

Dean (Academics) & Professor

Department of Computer Science and Engineering

## 14

Principal of the College

(Ex - Officio)

Dr. C. Venkatesh

## Principal

## Sengunthar Engineering College

File Description	Documents
Upload strategic plan and deployment documents on the website	<u>View File</u>
Upload any additional information	<u>View File</u>
Paste link for additional Information	http://scteng.co.in/documents/IQAC/AQAR/A QAR2020-2021/6.1.2.pdf

# 6.2 - Strategy Development and Deployment

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

### Objectives

The primary goal is to equip the students with relevant and conceptualized professional skills and in turn to guide them towards a deserving career all around the world with the values of `Sincerity', `Hard Work' and `Ethics'.

Motivation

- To make students academically sound, skillful, and prepare them for life-long learning.
- To make the learning "student-centric" rather than "teacher-centric"
- Faculties are encouraged to use ICT tools for effective Teaching -Learning
- Ensuring effective governance through decentralization

- Students overall development through active participation
- Effective Training for better placement
- Financial Planning & Management

### Methodology

- Plan Academic schedule and Time Table
- Commencement of classes
- Conduct of internal assessment test
- Evaluation and Analysis
- Feedback and Remedial measures
- Conduct of End Semester Examination
- Result Analysis

### Outcomes

- Attainment of course outcome
- Improved result and better placement
- Gained knowledge and skill development

### Future Plan

- Improvement in research activities and faculty publication
- Focus on Consultancy activities

The Institute has prepared a strategic plan to fulfill the infrastructure, Academic Development, extracurricular activities, Sports, Cultural and defined target for the infrastructural facilities and academic development of the Institute. These targets have been set with extensive consultation with all holders, faculty, alumni, management and industry.

Perspective plan of the Institute for the period of 2021-2025,

- NAAC Accreditation with `A+' Grade
- NBA Accreditation for eligible programmes
- To have 50% of the Faculty with Ph.D qualification.
- Promote industry-institution collaboration with top MNCs.
- Enhance the research and consultancy activities
- Renovate infrastructure facilities and support systems
- Introduce new programmes on current trend domains
- Improve the teaching learning process
- Enhance the Alumni interaction and outreach activities
- Conduction of training and value added courses

• Empower the EDC and WEC activities

Deployment of Strategic Plan

- NAAC Accreditation with A+ Grade
  - More focus will be given to Teaching -Learning and Research & Development to attain NAAC with A+ grade in the second cycle of accreditation
  - Best practices and innovation are to be more focused.
- NBA Accreditation for eligible programmes
  - It is necessary to acquire all the eligible UG programs accredited by the NBA from time to time.
  - Strengthen the departmental activities to meet the growing needs in academia and research.
- To have 50% of the Faculty with PhD qualification.
  - Encourage faculty to register for Ph.D.
  - Support faculty who have already registered to complete their Ph.D.
  - Provide financial support for participation and publication

• Promote industry-institution collaboration.

- Enhancing the number of MOUs with Industry and revisiting the existing MOUs based on its merits.
- Collaboration with Industries for research and innovative projects.
- Increasing the connect with the Industry through guest lecturesand expert's talk
- Increase industrial visits/internships and make it more accountable.
- Enhance the research and consultancy activities
  - To enhance the quality of research publications by motivating faculty to publish in SCI/Scopus indexed journals.
  - Focus on increasing the external funded research projects
  - Fostering Industry sponsored R&D projects.
  - Enhance the Consultancy projects.
- Renovate infrastructure facilities and support systems
  - Academic infrastructure to be strengthened further
  - Renovate the laboratories and computing facilities

- Online access materials shall be provided
- To upgrade the internet bandwidth to support the continuous utilization
- Introduce new programmes on current trend domains
  - Introduction of new courses on current trend domains such as Cyber Security, Artificial Intelligence and Data Science
  - Curriculum and Syllabus shall be framed and get approval of BoS
- Improve the teaching learning process
  - Implement pedagogical innovations: OBE, active learning, open ended experiments. Extended classrooms (virtual class rooms): Lecture capturing.
  - Blended learning: E-learning, virtual labs, NPTEL/MOOCs,
  - Comprehensive course implementation.
  - Encourage self-learning techniques.
- Enhance the Alumni interaction and outreach activities
  - Improve the involvement of alumni in all the aspects of Institutions development by collaborating with them in placements, guest lecture, mentoring students in various projects, mentoring incubate, research and development, consultancy.
- Conduction of training and value added courses
  - Skill development training programmes to be conducted for faculty enrichment
  - To meet out the industry requirements value added courses to be conducted for the students
- Empower the EDC and WEC
  - Encourage more campus companies to provide start-up opportunities for our students.
  - Conduction of idea competition start up challenge
  - Provide the necessary infrastructure for incubating the ideas and start up
  - Enhance the EDC activities and programmes
  - Enhance the activities and programmes of WEC to leads a healthy/wealth life style of women faculty and students

File Description	Documents
Strategic Plan and deployment documents on the website	<u>View File</u>
Paste link for additional information	http://scteng.co.in/documents/IQAC/AQAR/A QAR2020-2021/6.2.1.pdf
Upload any additional information	<u>View File</u>

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

The Institution has various committees and all the committees are effectively functioning to meet out its objective and to the satisfaction of all the stakeholders. The effective functioning of the committee is monitored by the committee chairman. Our Institution has gotten tremendous benefits that have been reflected in other metrics.

COMMITTEE LIST

STATUTORY BODIES

- Governing Body Committee
- Academic Council Committee
- Board of Studies Committee
- Finance Committee

NON - STATUTORY BODIES

- Planning and Evaluation Committee
- Grievance Redressal Committee
- Examination Committee
- Admission Committee
- Library Committee

```
Student Welfare Committee
      Sexual Harassment Committee
   ۲
     Extra - Curricular Activities Committee
     Academic Audit Committee
   List of Members of Governing Body
Sl. No.
Members as per UGC Norms
Name of the Members
1
Chairperson
ThiruJansons T.S. Natarajan
President, Sengunthar Charitable Trust
Tiruchengode
2
Management Member
Prof. A. Baladhandapani
Secretary and Correspondent
Sengunthar Charitable Trust
Tiruchengode
3
Management Member
Mr. M.K. Dhanasekaran
Treasurer, Sengunthar Charitable Trust
```

```
Tiruchengode
4
Management Member
Mr. T. Shanmugasundaram
Joint Secretary, Sengunthar Charitable Trust
Tiruchengode
5
Management Member
Er. A.B. Madhan
CEO,
Sengunthar Institutions
6
Management Member
Mr. T. AravindThirunavukkarasu
Director Corporate Relations and Training
Sengunthar Institutions
7
UGC Nominee
Prof. M. R. Bhagwan Singh
Professor of Mech. Engg. (Retd.)
B.M.S College of Engineering
Bull Temple Road, Basavangudi
Bengaluru
```

```
8
State Government Nominee
Prof. M. Deepak Kumar
Assistant Professor
Department of Metallurgical Engineering
Government College of Engineering
Salem
9
University Nominee
Dr. S. Kalaiselvam
Professor
Department of Applied Science and Technology
AC Tech Campus
Anna University
Chennai
10
Industrialist
Dr.R.Venkatesan
Group Head & Scientist G Ocean Observation Systems National
Institute of Ocean Technology
Chennai
11
Academician
Dr. M. Umapathy
```

```
Professor
Department of Instrumentation and Control Engineering
National Institute of Technology
Tiruchirapalli
12
Teachers of the College
Dr. K.L. Palanisamy
Dean (Student Affairs) cum Professor and Head
Department of Science and Humanities
13
Teachers of the College
Dr. B. Sujatha
Dean (Academics) & Professor
Department of Computer Science and Engineering
14
Principal of the College
(Ex - Officio)
Dr. C. Venkatesh
Principal
Sengunthar Engineering College
LIST OF MEMBERS ACADEMIC COUNCIL
SL. NO.
MEMBERS AS PER UGC NORMS
```

```
MEMBERS NOMINATED
1.
The Principal (Chairman)
Dr. C. Venkatesh
2.
All the Heads of Departments in the college
  1. Dr.M.Seenirajan, Chairman, BOS / Civil
  2. Dr. M. Sakthivel, Chairman, BOS / CSE
  3. Dr. C. Aarthi, Chairman, BOS / ECE
  4. Dr. K. Umadevi, Chairman, BOS / EEE
  5. Dr. M. Selvakumar, Chairman, BOS / Mech
  6. Dr. P. Govindasamy Chairman, BOS / MBA
  7. Prof. P. Thangarasu, Chairman, BOS / Chemistry
3.
Four Teachers of the college representing different categories
of teaching staff by rotation on the basis of seniority of
service in the college.
  1. Dr. B. Sujatha, Dean (Academics)
  2. Dr. G. Jayamurugan, AsP / CSE
  3. Prof. T. Gohila, AsP/ EEE
  4. Prof. S. Bhuvana, HOD / English
4.
Not less than four experts from outside the college
representing such areas as Industry, Commerce, Law, Education,
Medicine, Engineering, etc., To be nominated by the Governing
Body.
  1. Mr. V. S. Ramesh, Director,
```

M/s. STEPS Knowledge Services Pvt. Ltd, Coimbatore.

1. Shri T.N. Thirukkumar, MD,

Jansons Industries, Tiruchengode.

1. Dr. N. Nagarajan, Principal,

Coimbatore Institute of Engineering and Technology, Coimbatore.

1. Dr. R. Satish Kumar, Principal,

Sengunthar College of Engineering, Tiruchengode.

5.

Three nominees of the university

1. Dr. K. Chinnakali,

Professor/Physics, CEG, Anna University, Chennai-25.

1. Dr. B. Kothandaraman,

Professor/Rubber and Plastic Technology,

Anna University, Chennai-44.

1. Dr. S. MoorthyBabu,

Professor/Crystal Growth Centre,

Anna University, Chennai-25.

6.

A faculty member nominated by the Principal (Member Secretary). Dr. K. L. Palanisamy,

```
Chairman, BOS / S& H
List of Members of Finance Committee
SL. NO.
MEMBERS AS PER UGC NORMS
MEMBERS NOMINATED
1.
The Principal (Chairman)
Dr.C. Venkatesh
2.
University Nominee
Mr. T. Nagarajan,
Deputy Registrar (Salary),
Anna University,
Chennai - 600 025.
3.
Member nominated by the Governing Body of the College
Thiru. T. Shanmugasundaram,
Joint Secretary,
Sengunthar Charitable Trust,
Tiruchengode - 637 205.
4.
A Senior-most Teacher of the College nominated by the Principal
Mr. C. Kandasamy,
```

Assistant Professor in Chemistry

The Functions of various Bodies:

The Finance -Committee, the Buildings-Committee and the Hostel Committee take important decisions regarding finance, building construction, renovation and maintenance and issues related to the college hostel. There is also the Teachers' Council and the Association of the Non-teaching staff.

Service Rules, Procedures, Recruitment and Promotion Policies:

Service rules and procedures are guided by the Anna University First Statutes (latest edition), the Constitution of the college and the rules of the State Government as amended from time to time in this regard.

The recruitment rules for the teaching staff are as per the norms along with the eligibility criteria prescribed by the UGC; that for the non-teaching people satisfies as per norms.

The promotional policies for teachers are according to G.O. and for non-teaching staff according to norms.

Grievance Redressal Mechanisms:

There are several Grievance Redressal Mechanisms including the Anti-Sexual Harassment Cell with its Internal Complaints Committee; the Anti-Ragging Cell; a Grievance Redressal Cell with complaints boxes prominently placed and the full implementation of the Right to Information.

File Description	Documents
Paste link to Organogram on the institution webpage	http://scteng.co.in/About/College
Upload any additional information	<u>View File</u>
Paste link for additional Information	http://scteng.co.in/documents/IQAC/AQAR/A QAR2020-2021/6.2.2.pdf
6.2.3 - Implementation of e-go areas of operation: Administra and Accounts Student Admiss	ation Finance

# **Support Examination**

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

## **6.3 - Faculty Empowerment Strategies**

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

### Welfare measures for Teaching Staff:

- Sengunthar Employees Welfare Fund
- Group Insurance.
- Festival advance.
- Medical Leave
- Earned Leave
- Free Transport Facility
- Prompt facilitation of Provident Fund loans.
- Hostel Accommodation facility
- On-Duty for attending programmes
- Financial assistance for FDP, Journal and workshop.
- Maternity Leaves to female staff
- Facility of Wi-Fi in campus.
- Ph.D. Increments to Teaching staff (Ph.D Allowance)

Welfare measures for Non-Teaching Staff:

- Membership of Group Insurance
- Sengunthar Employees Welfare Fund
- Festival advance.
- Festival bonus.
- Prompt facilitation of Provident Fund loans.
- Help with facilitation of bank loans.
- Crash Course in Computer Basics for Supporting Staff.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	http://scteng.co.in/documents/IQAC/AQAR/A QAR2020-2021/6.3.1.pdf

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

36

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

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

8

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.)

56

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

## 6.4 - Financial Management and Resource Mobilization

6.4.1 - Institution conducts internal and external financial audits regularly

The Institution has established a mechanism for conducting internal and external audits on the financial transactions every year to ensure financial compliance. Internal audit is conducted half yearly by the internal financial committee of the institution. The committee thoroughly verifies the income and expenditure details and the compliance report of internal audit is submitted to the management of the institution through principal. External audit is conducted once in every year by an external agency.

The mechanisms used to monitor effective and efficient use of financial resources are as below:

- Before the commencement of every financial year, the principal submits a proposal on budget allocation, by considering the recommendations made by the heads of all the departments, to the management.
- College budget includes recurring expenses such as salary, electricity, internet charges, maintenance cost, stationery, other consumable charges etc., and non recurring expenses like lab equipment purchases, furniture and other development expenses.
- The expenses will be monitored by the accounts department as per the budget allocated by the management.
- The depreciation costs of various things purchased in the preceding years are also worked out.

Process of the internal audit:

All vouchers are audited by an internal financial committee on

a half yearly basis. The expenses incurred under different heads are thoroughly checked by verifying the bills and vouchers. If any discrepancy is found, the same is brought to the notice of the principal. The same process has been followed for the last five years.

### Process of the external audit:

The accounts of the college are audited by chartered accountants regularly as per the government rules. The auditor ensures that all payments are duly authorized after the audit, the report is sent to the management for review. Any queries in the process of audit would be attended immediately along with the supporting documents within the prescribed time limits. The institution did not come across any major audit objection during the preceding years.

All these mechanisms exhibit the transparency being maintained in financial matters and adherence to financial discipline to avoid defalcation of funds or properties of the institution at all levels. The audited statement is duly signed by the authorities of the management and chartered accountant.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	http://scteng.co.in/documents/IQAC/AQAR/A QAR2020-2021/6.4.1.pdf

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

6.4.3 - Institutional strategies for mobilisation of funds and the optimal utilisation of resources Sources of funds are as follows: 1. Fees: Fees charged as per the university and government norms from students of various granted and self financed courses. 2. Autonomous Collection: Autonomous fees collected from students towards consolidated and provisional Mark statements, exam fee and mark statement fee. 3. Interest and funding from other collections: Bank interest and funding from other collections towards PMKVY Training programme, AICTE -STTP are other sources. The institute has a well-defined mechanism to monitor effective and efficient utilization of available financial resources for the development of the academic processes and infrastructure development. • Institutional budget is prepared by Principal every year taking into consideration of recurring and non-recurring expenditures. • Accordingly, all the administrative and academic heads are requested to submit the budget required for the subsequent financial year. Along with this all coordinators of different cells viz., R& D Cell, Exam Cell, T&P Cell, NSS Cell, etc. are instructed to submit their budget to Principal. All the major financial decisions are taken by the Institute's Local Managing Committee (LMC/CDC) and Governing Body (GB). • As and when urgent requirements arise it is given after sanctioned revived from Management. **File Description** Documents Upload any additional View File information Paste link for additional Information http://scteng.co.in/documents/IQAC/AQAR/A OAR2020-2021/6.4.3.pdf 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)

Internal Quality Assurance Cell (IQAC) has been established in the institution for initiatingquality enhancement schemes. It has been constituted as per the format prescribed by theNAAC and meetings are held periodically. Quality assurance strategy and processes are being discussed and subsequently reviewed by IQAC cell.

IQAC is one of the major policies making implementing units in college. It strives hard for upgrading the college infrastructure and all support facilities to meet the standards of education and growing needs of students. It assesses and suggests the parameters of quality education.

The initiatives undertaken are,

- Formation of IQAC cell
- Formation of alumni association
- Syllabus revision
- Initiating NAAC Preparation Work
- Initiating AAA Audit
- AICTE FDP Program
- NBA awareness program to Faculty members
- Constituting Various committees
- Review of performance of teaching non-teaching staff
- Feedback collection from students, faculty and alumni
- Review of teaching learning process
- Improving library facilities
- Participation in NIRF

Best Practices

Best Practice - 1

1. Title of the practice

"Online Examination System"

## 2. Goal

True education is to inculcate a thirst to apply all learned knowledge in their day to day life. It will improve the quality

of education among the students. Indeed, The quality of education is reflected in the End Semester Examinations. The End Semester Examinations have been conducted through Proctored Online Mode in our college in association with e-NOVA Software Solutions, Coimbatore. It enhances the perception of the students' thirst for education and broadens their horizons in the challenging and changing world. It also helps the Institution to maintain the quality of its educational Programmes.

#### 3. The Context

Educational Systems and Methodology are growing at a rapid rate. Simultaneously, the quality of Education is nurtured in the institution by conducting examinations during the lockdown period. The conduction of End Semester Examinations simplifies through the system which was adopted in the college for carrying out the activities of the examination. An online proctored examination enhances the quality of education.

4. The Practice

The best Practices in this system are listed below

- Username and Password for the mock examination and End Semester Examination shared to the students' through their official email. Once a user logs into the system with Username and Password, it takes the students to take a photograph with their details. If the student does not give access to any of these, the student cannot be able to appear for the examination or the remote proctor can disable the examination in due course of time.
- The system uses Artificial intelligence (AI) to detect and record face emotions, eye movements and all activities, without any hindrance to the examinations.
- In addition to auto proctoring by the online examination system, Manual Proctors (Invigilators) continuously watch and monitor the students during the entire duration of the examination.
- The proctor with the help of the system can issue regular warnings on the screen of the student device. The examination is auto submitted after the completion of the total duration of the examination However; students facing any technical issue during the examination can continue upto 15 minutes after the scheduled session time.

- All the actions were closely monitored by the remote proctors during the examination.
- All the Activities were automatically recorded
- Capture of facial photo. During the examination, the AI tool constantly monitors the picture of the student taking the examination with the facial photo captured initially for any mismatch. In case of any mismatch, the system captures the anomaly and a notification to the student / live proctor was also instantly displayed.

5.Evidence of Success

The Evidence for success is seen in the feedback received from the students regarding the examination. Some of their comments are given below:

- The main satisfaction is any technical issues the students can contact the Class Advisor immediately to solve it.
- Overall performance of the students in their written exam is satisfactory

6.Problems Encountered

Mock examination is mandatory. It is intended to familiarize the students to the examination environment and validate the compatibility of their Desktop/Laptop/Smart-Phone/Tablet or other devices. Further, Problems Encountered during the mock examinations and few technical problems were solved by the technicians before the End Semester Examinations.

Best Practice - 2

1. Title of the practice

"Learning Management System"

2. Goal

A true education is to inculcate a thirst to apply all learned knowledge in their daytoday life. It will promote Research attitude among the students. The Learning Management System is introduced in this Institution to promote students' worldly wisdom. It gradually changes the perceptions of the students and broadens their horizon in the challenging and changing world. When the learning practice is simplified, it would enhance the interest in all the arenas. Learning Management System would help the students to get a clear perspective to select their Post Graduate career Program and Doctoral Degree program.

LMS software helps to plan, implement, facilitate, assess, and monitor students' learning. It also helps the Institution to maintain the integrity of their educational Programmes. It enables faculty members to effectively and efficiently develop Courses, deliver instruction, facilitate Communication, foster collaboration and assess students. LMS can be used to support traditional face-to-face instruction, as well as blended and online educational environments.

### 3. The Context

Educational Systems and Methodology are growing at a rapid rate. This system simplifies and attracts the learners to learn new techniques in their respective field. LMS fulfills and enhances knowledge of students' thirst.

#### 4. The Practice

The Institution had introduced innovative SEC LMS developed by the faculty members. The LMS provides a new world of possibilities to take the learning to a new level.

- Faculties create their Courses/Lessons in the LMS Software.
- Faculty members create their assignments and tests and students can take the tests as many times to practice untiltheybecome perfect.
- The Interactive White Board is used to make both teaching and learning more effective, clear, fun and engaging. Its whiteboard is a super portable system. Capture devices also allow users to capture all of the ink strokes that are written on the whiteboard. When used in conjunction with a video projector it turns the ordinary whiteboard surface into a fully interactive whiteboard.

### 1. Evidence of Success

The Evidence for success is seen in the feedback received from the students and staff members. Some of their comments are given below:

- LMS has improved the performance of the faculty members and teaching quality and their integrity.
- Overall performance of the students in their written exam is satisfactory which exhibits the effective and innovative teaching methodology of the faculty members.
- Most of the students have performed well taking care of the minute details of the English Grammar. The students can demonstrate their creative skills.

5.Problems Encountered

Few technical problems encountered in the LMS and which were solved by the technicians.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	http://scteng.co.in/documents/IQAC/AQAR/A QAR2020-2021/6.5.1.pdf

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

IQAC being the central body within the college monitors and reviews the teaching-learning process regularly. Institutional strategic plan and activities are followed for the attainment. The feedback received from various stakeholders. Based on feedback various innovative activities and reforms were introduced. The improvements based on feedback implemented are:

IQAC periodically reviews the teaching-learning process, structures & methodologies of operations, and learning outcomes:

The standard methods of teaching, learning, and evaluation which are proven over the years are being followed.

Academic Calendar: Based on the University Academic Calendar the Institute schedules the academic calendar well in advance at the start of the year with ample time frame for not only the regular teaching-learning process but also to accommodate the various events like seminar/ guest lecture/ workshops/FDPs/ Hands-on-series and many more. Preparation of lesson plan for each Semester: The lesson plan is prepared by the faculty members for all the subjects they teach in that particular semester. Enriching the curriculum with guest lectures, industrial visits, and Internships

Faculty Class Record: Everyday faculty prepare and submit details of the lecture along with the topic covered on an online portal.

Evaluation of teachers by students: The institution has a feedback system to evaluate the teachers by students. The regular evaluation of the teachers by the students, feedback on teaching methodologies, course delivery, attitude, strengths and weaknesses, difficulties faced in the subject give a clear idea about the problems faced by the students. Director and management also monitor the feedback system and take appropriate corrective actions.

Student learning outcomes: The institute monitors the performance of the students regularly. It has specified procedure to collect and analyze data on student learning outcomes; the following points are adopted by the institute in this context:

- Regular class tests and interactions
- Continuous Evaluation comprising internal tests, assignments, group discussions, and seminar presentations.
- Semester system of examination for all courses.
- Providing Question banks of various subjects to the students.
- Providing Lecture notes through an online portal
- Timely Redressal of students' grievances.
- At least 75% Attendance is compulsory in each semester.
- Extra classes for weak students to solve their problems.

Effective internal examination and evaluation systems: Institute maintains an effective internal examination and evaluation system.

Students' result analysis: Institute has the provision of analysis of students' performance after the announcement of their semester results. If the result of the students, in a subject, is not found up to the mark, necessary steps are taken to find out the reasons and the concernedfacultymembersarecouns elledandmotivatedtoworktowardsimprovement.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	http://scteng.co.in/documents/IOAC/AOAR/A OAR2020-2021/6.5.2.pdf
5.5.3 - Quality assurance initians Institution include Regular mo IQAC Feedback collected, and Ised for improvement of the i Collaborative quality initiativ	eeting of the alysed and institution res with other
nstitution(s) Participation in other quality audit recognized national or international agen (SO Certification)	d by state,
other quality audit recognized national or international agen	d by state,
other quality audit recognized national or international agen ISO Certification)	d by state, ncies (such as
other quality audit recognized national or international agen (SO Certification) File Description Paste the web link of annual	by state, ncies (such as Documents http://scteng.co.in/documents/Academics/A
bether quality audit recognized national or international agen (SO Certification) File Description Paste the web link of annual reports of the Institution Upload e-copies of	by state, ncies (such as Documents http://scteng.co.in/documents/Academics/A nnualReport/AnnualReport2021.pdf

# 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

The concept of gender equity refers to "fairness of treatment for both women and men, according to their respective needs. This may include equal treatment or treatment that is different but which is considered equivalent in terms of rights, benefits, obligations and opportunities"

Education deals with the formation of habits of human beings.

If so, we need education seriously to focus on promoting the equal participation of women and men in making decisions; reducing enrolment gap between women's and men's access; giving equality in learning process, educational outcomes and external results; and providing equal benefits for both sexes.

Gender equity has been encouraged in the recruitment of both teaching and non-teaching staff in our educational institutions. In addition, provisions have been made for women employees to get maternity leave.

The institute has a policy of appreciating faculty without gender bias. Women faculty are nominated, based on their ability, as deans, heads of the departments and conveners of various committees and discharging their duties efficiently

Separate NSS unit is functioning exclusively to encourage the female students and the unit is successfully conducting various activities to serve the society. Female students actively participated in the various events conducted by the NCC unit of our college. Equal opportunities provided to the female students to participate in all the events like Students Technical Symposium, Celebrations of important days, Sports events, Cultural events and so on.

Women empowerment cell is effectively functioning in our college and it has been conducting various programmes on gender bias and stereotyping, feminine hygiene, gender equity and women's rights. Our institution prominently displays women's helpline numbers at different places on campuses.

Women's Day Celebration 2021

MAHILA Club& WomenEmpowerment Cell celebrated International Women'sDayCelebrationon 9th March 2021 at 11a.m. through online mode to raise awareness about the status and dignity of women among the students. The Chief Guest of the programme was Ms. M. K. Kalaiselvi, Joint secretary, Insurance Corporation Employees Union, SalemDivision. Chief Guest pointed out that the female worked against the spread of disease as a Health Minister, Doctor, Health worker during the Covid 19 pandemic. Finally female students showcased their talents in the various events and the students were appreciated with prizes.

Counseling and Guidance to Hostel Students

Counseling and Guidance on Feminine Hygiene and Health to the Girls Students staying in the Hostel is provided by the Team of Female Faculty Members from Mahila Club every month.

Safety and Security in the Campus for Girls Students

Safety and security of all the students, teachers, non-teaching staff and the visitors to the college is always the first priority. To ensure a safe campus and a secured environment the college has taken the following initiatives:

- Safety and Security of the Girls Students in campus should be ensured by Installing CCTV cameras and monitoring Campus Security Personal.
- Grievance Redressal Cell provides an accurate solution for the grievances received from the students.
- Sexual Harassment Cell functioning to prevent sexual harassment by promoting gender equality and gender amity among Students
- Contact numbers of HoDs/Class Advisors have been informed to their parents for any enquiry related to the students academic progress and safety.

Awareness on Social Media Security

 Awareness on Social Media Security is created among the Students and Staff by conducting a webinar on "Cyber Security - Need of the hour" which was organized by IEI -ELC and SEC - IIC on 27.05.2021. Resource Person: Dr E.Khalieraaj, Addl. Director - General, National Cyber Safety and Security Standards, New Delhi.

File Description	Documents		
Upload any additional information		<u>View File</u>	
Paste link for additional Information	-	teng.co.in/documents/IQAC/AQAR/ QAR2020-2021/7.1.1.pdf	A
7.1.2 - The Institution has facilities for alternate sources of energy and energy conservation: Solar energy Biogas plant Wheeling to the Grid Sensor-based energy conservation Use of LED bulbs/ power-efficient equipment		A. Any 4 or All of the above	

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

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

Sengunthar Engineering College is committed to "zero waste" and reducing the environmental impact of its activities through its philosophy of "reduce-reuse-recycle". It advocates conservation of resources, especially natural resources, to generate minimal waste and manage it from its inception to its final disposal. Routine waste is daily collected in dustbins at different locations, segregated into different types of bio and non-bio degradable waste and non-bio degradable wastes taken to the dumping yard. Biodegradable wastes are converted into nutrient rich manure in the Vermicomposting Plant.

Efforts for Waste Management include the following:

The Vermicomposting Plant is established to decompose the biodegradable wastes generated at our college campus and also demonstrated to the students about the construction of the plant. Solid waste such as fallen leaves and kitchen wastes are collected from the various points of sources and segregated according to their nature. Nutrient rich manure is produced from the biodegradable wastes by the Vermicomposting Process. The vermi compost is used in the College garden.

Used Papers, old newspapers, damaged note books and files are given for recycling to the external agencies. Double sided printing is encouraged to minimize the paper waste.

E-waste management:

The e-waste is limited in the campus by maintaining a repair centre for computers and computer-based items. The computer maintenance and repair is centralized for better coordination and all the repair or non-operating complaints are streamlined and the report of the repair service is monitored. The irreparable systems are discarded and the usable parts are used for the replacements. The discarded parts of the systems and other electronic equipment are sold out to vendors for their own recycling process.

Page 212/228

Food waste: 15 Kgs of food waste is generated from the hostel and canteen per day which is sent to piggeries. Quantity of food waste generated in the Hostel is monitored by the Warden and the Management periodically and the necessary steps have been taken to reduce the food waste by giving awareness among the students.

Stopping or limiting the usage of non-biodegradable material like plastic bags inside the campus.

File Description	Documents	
Relevant documents like agreements/MoUs with Government and other approved agencies		<u>View File</u>
Geotagged photographs of the facilities		<u>View File</u>
Any other relevant information		<u>View File</u>
7.1.4 - Water conservation facilities available in the Institution: Rain water harvesting Bore well /Open well recharge Construction of tanks and bunds Waste water recycling Maintenance of water bodies and distribution system in the campus		
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 initiative	es include	
<ul> <li>7.1.5.1 - The institutional initiatives for greening the campus are as follows:</li> <li>1. Restricted entry of automobiles</li> <li>2. Use of bicycles/ Battery-powered vehicles</li> <li>3. Pedestrian-friendly pathways</li> <li>4. Ban on use of plastic</li> <li>5. Landscaping</li> </ul>		A. Any 4 or All of the above

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

.1.6.1 - The institution's initist reserve and improve the env arness energy are confirmed following:	ronment and
<ol> <li>Green audit</li> <li>Energy audit</li> <li>Environment audit</li> <li>Clean and green camparecognitions/awards</li> <li>Beyond the campus end</li> </ol>	
promotional activities	Documents
promotional activities File Description Reports on environment and energy audits submitted by the	Documents
promotional activities File Description Reports on environment and energy audits submitted by the auditing agency Certification by the auditing	Documents View File

· The Institution has a disabled-7.1 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, screenreading software, mechanized equipment, etc. Provision for enquiry and information:

Human assistance, reader, scribe, soft copies of reading materials, screen reading, etc.

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

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

The institution believes in equality of all cultures and traditions as is evident from the fact that students belonging to different caste, religion, regions are studying without any discrimination. Though the institution has diverse sociocultural background and different linguistics, we do not have any intolerance towards cultural, regional, linguistic, communal socio economic and other diversities. Institution is undertaking various initiatives in the form of celebration of days of Eminent personalities, National Festivals, NSS, YRC, Annual Day, Sports Day, National Level Students Technical Symposium and other such activities to provide for an inclusive environment by bringing students and teachers with diverse backgrounds on a single platform. These functions help in developing tolerance, harmony towards culture, region and linguistics and also communal, socio-economic and other diversities.

1. Name of the Programme: Muniswaran Temple Cleaning Work

Category of Programme: Communal / Religious diversity and Harmony

On 08.03.2021, our NSS organized the "Clean India Safe India" activity at the Muniswaran Temple near Sengunthar Engineering College, Tiruchengode. Our 30 NSS Volunteers from diverse cultural and regional backgrounds actively participated and cleaned the Temple.

2. Name of the Programme: Covid-19 Awareness for the Local People during pandemic

Category of Programme: Socio-economic diversity and Harmony

S.No

Date

Name of the activity

Place of activity

1

23.04.2021

COVID- Awareness for local people

Cadets hometown

Coronavirus disease (COVID-19) is an infectious disease caused by the SARS-CoV-2 virus. Most people infected with the virus will experience mild to moderate respiratory illness and recover without requiring special treatment. However, some will become seriously ill and require medical attention. Older people and those with underlying medical conditions like cardiovascular disease, diabetes, chronic respiratory disease, or cancer are more likely to develop serious illness. The best way to prevent and slow down transmission is to be well informed about the disease and how the virus spreads. Wearing a properly fitted mask, and washing your hands or using an alcohol-based rub frequently. Get vaccinated when it's your turn and follow local guidance.

Our college NCC Cadets have created poster presentations, drawings and provided masks for the children in their area by explaining about the causes of COVID-19 and preventive measures to be followed for a healthy life.

COVID - 19 PRECAUTION AND PREVENTION ACTIVITIES BY OUR NCC
### CADETS

3. Name of the Programme: Pournami Kavi Arangam by Nuvazhi Tamil Mandram

Category of Programme: Linguistic diversity and Harmony

Pournami Kavi Arangam is conducted every month in association with Nuvazhi Tamil Mandram. Besides, Tamil poem composing, essay writing, oratorical competitions are also conducted every year.

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:

SEC undertakes different initiatives by organizing various activities to sensitize students and employees to the constitutional obligation, values, rights, duties and responsibilities of the citizens.

#### 1. Republic Day & Independence Day Celebrations

Every year Republic day is celebrated on 26th Jan by organizing activities highlighting the importance of the Indian Constitution. Similarly constitution day also would be celebrated on 26th Nov every year. Independence Day is also celebrated every year to highlight the struggle of freedom and the importance of the Indian constitution.

#### 2.Constitution of India

Sengunthar Engineering College (Autonomous) has introduced as a mandatory course 19MDC601 Constitution of India at UG Degree level across all engineering disciplines to create awareness and sensitization of the students and employees to constitution obligations.Webinar on "Constitution of India" conducted on 25.01.2021 for the staff members of our college to create awareness about their rights and duties as a citizen of India. 3. Students Induction Programme

Two weeks Students Induction Programme (SIP) conducted for freshers admitted in the UG programmes from 09.11.2020 to 21.11.2020.

The Student Induction Programme is to help new students adjust and feel comfortable in the new environment, inculcate in them the ethos and culture of the institution, help them build bonds with other students and faculty members, and expose them to a sense of larger purpose and self exploration.

The term induction is generally used to describe the whole process whereby the incumbents adjust to or acclimatize to their new roles and environment. In other words, it is a well planned event to educate the new entrants about the environment in a particular institution, and connect them with the people in it.

The Student Induction Programme engages with the new students as soon as they come into the institution, before regular classes start. At the start of the induction, the incumbents learn about the institutional policies, processes, practices, culture and values.

List of activities conducted during SIP:

- 1. Lectures on Universal Human Value, Ethics, Communication Skill & Body Language
- 2. Physical Activity & Yoga.
- 3. Opportunities in Engineering field & Research.
- 4. Familiarization to Dept./Branch/Rules & Regulations.
- 5. Speech by Eminent People & Alumni.

4. Programmes conducted

Various Programmes organised to create awareness about the duties and responsibilities of students as a citizen.

S.No

Name of the Activity

Date

1

```
World Water Day
22.03.2021
2
World Health Day
07.04.2021
3
World Earth Day
22.04.2021
4
World Malaria Day
25.04.2021
5
World Telecommunication Day
17.05.2021
6
World Environment Day
05.06.2021
5. COVID AWARENESS FOR LOCAL PEOPLE
Our college NCC Cadets have created poster presentations,
drawings and provided masks for the children in their area by
explaining about the causes of COVID-19 and preventive measures
to be followed for a healthy life.
```

File Description	Documents	
Details of activities that inculcate values necessary to transform students into responsible citizens		<u>View File</u>
Any other relevant information		<u>View File</u>
7.1.10 - The institution has a p code of conduct for students, t administrators and other staff conducts periodic sensitization programmes in this regard: T Conduct is displayed on the w is a committee to monitor adh Code of Conduct Institution of professional ethics programme students, teachers, administra other staff Annual awareness on the Code of Conduct are or	teachers, f and h Code of ebsite There erence to the rganizes es for tors and programmes	A. All of the above
File Description	Documents	
Code of Ethics - policy document		<u>View File</u>
Details of the monitoring committee composition and minutes of the committee meeting, number of programmes organized, reports on the various programmes, etc. in support of the claims		<u>View File</u>
committee composition and minutes of the committee meeting, number of programmes organized, reports on the various programmes,		<u>View File</u> <u>View File</u>
committee composition and minutes of the committee meeting, number of programmes organized, reports on the various programmes, etc. in support of the claims Any other relevant information 7.1.11 - Institution celebrates / o events and festivals		
committee composition and minutes of the committee meeting, number of programmes organized, reports on the various programmes, etc. in support of the claims Any other relevant information 7.1.11 - Institution celebrates / o events and festivals		View File al and international commemorative days,
committee composition and minutes of the committee meeting, number of programmes organized, reports on the various programmes, etc. in support of the claims Any other relevant information 7.1.11 - Institution celebrates / c events and festivals <b>The following importan</b>		View File al and international commemorative days,
committee composition and minutes of the committee meeting, number of programmes organized, reports on the various programmes, etc. in support of the claims Any other relevant information 7.1.11 - Institution celebrates / of events and festivals The following importan S.No		View File al and international commemorative days,

```
Republic Day
26.01.2021
2
World Water Day
22.03.2021
3
World Health Day
07.04.2021
4
World Earth Day
22.04.2021
5
World Malaria Day
25.04.2021
6
World Telecommunication Day
17.05.2021
7
World Environment Day
05.06.2021
8
Independence Day
01.08.2021
```

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

# 7.2 - Best Practices

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

Best Practice - 1

1. Title of the practice

"Online Examination System"

2. Goal

True education is to inculcate a thirst to apply all learned knowledge in their day to day life. It will improve the quality of education among the students. Indeed, The quality of education is reflected in the End Semester Examinations. The End Semester Examinations have been conducted through Proctored Online Mode in our college in association with e-NOVA Software Solutions, Coimbatore. It enhances the perception of the students' thirst for education and broadens their horizons in the challenging and changing world. It also helps the Institution to maintain the quality of its educational Programmes.

## 3.The Context

Educational Systems and Methodology are growing at a rapid rate. Simultaneously, the quality of Education is nurtured in the institution by conducting examinations during the lockdown period. The conduction of End Semester Examinations simplifies through the system which was adopted in the college for carrying out the activities of the examination. An online proctored examination enhances the quality of education.

## 4. The Practice

The best Practices in this system are listed below

- Username and Password for the mock examination and End Semester Examination shared to the students' through their official email. Once a user logs into the system with Username and Password, it takes the students to take a photograph with their details. If the student does not give access to any of these, the student cannot be able to appear for the examination or the remote proctor can disable the examination in due course of time.
- The system uses Artificial intelligence (AI) to detect and record face emotions, eye movements and all activities, without any hindrance to the examinations.
- In addition to auto proctoring by the online examination system, Manual Proctors (Invigilators) continuously watch and monitor the students during the entire duration of the examination.
- The proctor with the help of the system can issue regular warnings on the screen of the student device. The examination is auto submitted after the completion of the total duration of the examination However; students facing any technical issue during the examination can continue upto 15 minutes after the scheduled session time.
- All the actions were closely monitored by the remote proctors during the examination.
- All the Activities were automatically recorded
- Capture of facial photo. During the examination, the AI tool constantly monitors the picture of the student taking the examination with the facial photo captured initially for any mismatch. In case of any mismatch, the system captures the anomaly and a notification to the student / live proctor was also instantly displayed.
- 5. Evidence of Success

The Evidence for success is seen in the feedback received from the students regarding the examination. Some of their comments are given below:

• The main satisfaction is any technical issues the students can contact the Class Advisor immediately to

solve it.

• Overall performance of the students in their written exam is satisfactory

6. Problems Encountered

Mock examination is mandatory. It is intended to familiarize the students to the examination environment and validate the compatibility of their Desktop/Laptop/Smart-Phone/Tablet or other devices. Further, Problems Encountered during the mock examinations and few technical problems were solved by the technicians before the End Semester Examinations.

Best Practice - 2

1. Title of the practice

"Learning Management System"

2. Goal

A true education is to inculcate a thirst to apply all learned knowledge in their day today life. It will promote Research attitude among the students. The Learning Management System is introduced in this Institution to promote students' worldly wisdom. It gradually changes the perceptions of the students and broadens their horizon in the challenging and changing world. When the learning practice is simplified, it would enhance the interest in all the arenas. Learning Management System would help the students to get a clear perspective to select their Post Graduate career Program and Doctoral Degree program.

LMS software helps to plan, implement, facilitate, assess, and monitor students' learning. It also helps the Institution to maintain the integrity of their educational Programmes. It enables faculty members to effectively and efficiently develop Courses, deliver instruction, facilitate Communication, foster collaboration and assess students. LMS can be used to support traditional face-to-face instruction, as well as blended and online educational environments.

### 3. The Context

Educational Systems and Methodology are growing at a rapid rate. This system simplifies and attracts the learners to learn new techniques in their respective field. LMS fulfills and enhances knowledge of students' thirst.

## 4. The Practice

The Institution had introduced innovative SEC LMS developed by the faculty members. The LMS provides a new world of possibilities to take the learning to a new level.

- Faculties create their Courses/Lessons in the LMS Software.
- Faculty members create their assignments and tests and students can take the tests as many times to practice until they become perfect.
- The Interactive White Board is used to make both teaching and learning more effective, clear, fun and engaging. Its whiteboard is a super portable system. Capture devices also allow users to capture all of the ink strokes that are written on the whiteboard. When used in conjunction with a video projector it turns the ordinary whiteboard surface into a fully interactive whiteboard.

### 5.Evidence of Success

The Evidence for success is seen in the feedback received from the students and staff members. Some of their comments are given below:

- LMS has improved the performance of the faculty members and teaching quality and their integrity.
- Overall performance of the students in their written exam is satisfactory which exhibits the effective and innovative teaching methodology of the faculty members.
- Most of the students have performed well taking care of the minute details of the English Grammar. The students can demonstrate their creative skills.

6.Problems Encountered

Few technical problems encountered in the LMS and which were solved by the technicians.

File Description	Documents
Best practices in the Institutional website	http://scteng.co.in/documents/IQAC/AQAR/A QAR2020-2021/7.2.pdf
Any other relevant information	http://scteng.co.in/IQAC/AQAR/AQAR-2020-2 021

# 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)

The Vision and Mission statement of our institution clearly pointed towards rural based education and development of the rural people at large. A value based education based on the autonomous curriculum which combines with the core values attached for the improvement of the students. The institute is 20 years old, and has a strong bonding with the local and rural people of Tamilnadu. The institute wishes to emerge as a Centre of Academic Excellence by providing students opportunities for teaching the subjects to earn the desired degree and also help them to gain knowledge and skills in subjects beyond the course to make the students ready for the present global job market and mold them to skilled professionals. The institute promotes innovation, research and development for the faculty and students. Some projects are identified and the institute promotes and sponsors them to encourage their zeal towards research. Often the students come up with innovative ideas for startups which are funded by the Management through various lab equipment. For upgrading faculty skills the institution encourages and sponsors them for Ph.D., research, seminars, conferences. Publication of articles and papers and membership of professional bodies are supported by the Management. This has resulted in a good number of publications to direct the institute to achieve its goal to become a centre of excellence. The institute also creates an enabling environment to foster research culture. The college makes information related to research and innovation available by circulating related notices. The institute organizes different activities to enhance the students' personality. Students are trained and groomed to enhance their Employability skills by imparting technical training, Soft skill, GD and Aptitude classes etc. to make the student industry ready to face the current job market successfully. To upgrade their knowledge and enlighten them on

the present trends of technological advancements, regular lectures by eminent professors and industrialists, seminars, workshops, quiz contests are conducted. Majority of students have emerged as professionals of high level and they are pursuing successful careers in various MNCs and corporate houses. Apart from the above activities our institute offers a best in class of Entrepreneurship Activities in different dimensions to bring out the entrepreneurial talents among the students through frequent organizing of Entrepreneurship Awareness Camp with the support of Entrepreneurship Development Institute of India, Ahmadabad. Some students have become entrepreneurs and established their own companies with the support of this cell. Also our institution gives priority to Co curricular and Extra Curricular activities and physical activities, such as Sports, Cultural, Yoga, and Meditation etc.

File Description	Documents
Appropriate link in the institutional website	http://scteng.co.in/documents/IQAC/AQAR/A QAR2020-2021/7.3.1.pdf
Any other relevant information	<u>View File</u>

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

To work towards getting the best ranking status among the colleges in and around Namakkal. An organization would like to set up an Entrepreneurial Association with the identification of the Alumni Association which has spread across the world at various prominent positions since its inception. It is decided to utilize their services in a diplomatic way in skills, startups, etc., by identifying the appropriate Alumni. Therefore, IQAC makes the necessary arrangements to exchange ideas with all Alumni Association in order to promote Entrepreneurship and Start-ups.

e -Content development facilities the importance of online classes is fully recognized by all academic institutions during the pandemic situation of COVID lockdown. Keeping the importance of online teaching in the future in view, the college decided to make available the e-Content useful to the students by improving facilities of e-Content development.

To encourage the faculty members to pursue PhD for the quality betterment of their career. In addition, the quality publications are also instead for their further improvement. To aim for conducting a minimum of two international conferences per year.

To offer Hands-on Training along with certificates which make the student's profile better and it will command better placements with the industries.