

YEARLY STATUS REPORT - 2020-2021

Part A

Data of the Institution

1.Name of the Institution SARANATHAN COLLEGE OF ENGINEERING

• Name of the Head of the institution DR. D.VALAVAN

• Designation PRINCIPAL

• Does the institution function from its own Yes

campus?

• Phone no./Alternate phone no. 8489915201

• Mobile no 9488488537

• Registered e-mail principal@saranathan.ac.in

• Alternate e-mail secretary@saranathan.ac.in

• Address VENKATESWARA NAGAR PANJAPPUR,

EDAMALAIPATTI PUDUR POST

• City/Town TIRUCHIRAPPALLI

• State/UT TAMILNADU

• Pin Code 620012

2.Institutional status

• Affiliated / Constituent AFFILIATED

• Type of Institution Co-education

• Location Urban

• Financial Status

Self-financing

• Name of the Affiliating University ANNA UNIVERSITY CHENNAI

• Name of the IQAC Coordinator Dr. C KRISHNAKUMAR

• Phone No. 8489915207

• Alternate phone No.

• Mobile 9500978151

• IQAC e-mail address iqaccoordinator@saranathan.ac.in

• Alternate Email address krishnakumar-eee@saranathan.ac.in

3. Website address (Web link of the AQAR (Previous Academic Year)

4.Whether Academic Calendar prepared during the year?

Yes

• if yes, whether it is uploaded in the Institutional website Web link:

https://saranathan.ac.in/home.php
?tgt=eve_writeup&eid=315

5.Accreditation Details

Cycle	Grade	CGPA	Year of Accreditation	Validity from	Validity to
Cycle 1	A+	3.27	2021	19/04/2021	18/04/2026

6.Date of Establishment of IQAC

03/10/2019

7.Provide the list of funds by Central / State Government UGC/CSIR/DBT/ICMR/TEQIP/World Bank/CPE of UGC etc.,

Institutional/Depa rtment /Faculty	Scheme	Funding Agency	Year of award with duration	Amount
Nil	Nil	Nil	Nil	Nil

8. Whether composition of IQAC as per latest

Yes

NAAC guidelines

• Upload latest notification of formation of IQAC

View File

9.No. of IQAC meetings held during the year 3

- Were the minutes of IQAC meeting(s) and Yes compliance to the decisions have been uploaded on the institutional website?
- If No, please upload the minutes of the meeting(s) and Action Taken Report

No File Uploaded

10.Whether IQAC received funding from any of the funding agency to support its activities during the year?

• If yes, mention the amount

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

IQAC prepared the NAAC application and relevant documents of the institution and got A+ grade.

In various meetings, IQAC is insisting about quality improvement through research activities such as patent filing, research article submittion, funding proposals, etc. In this academic year, a noticeable improvement is obtained in publications.

Based on the suggestions proposed by the IQAC, various ICT facilities have been implemented in the institution.

Two new courses have been introduced based on the discussion made in IQAC.

Online placement training was conducted as per the suggestion given by IQAC. This training maintained continuous learning even in the period of pandemic.

12.Plan of action chalked out by the IQAC in 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
Preparation of NAAC Application	Obtained A+ Grade in accreditation process
Introduction of new courses under UG level	B.E., (Artificial intelligence and Data Science) and B.E., (Computer Science and Business Systems) have been introduced.
Proposal to increase ICT facilities	Number of overhead projectors increased in class rooms
Proposal to form a committee to nurture nature in the campus	Green Campus Committee has been established.

13. Whether the AQAR was placed before statutory body?

No

• Name of the statutory body

Name	Date of meeting(s)
Nil	Nil

14. Whether institutional data submitted to AISHE

Part A				
Data of the Institution				
1.Name of the Institution	SARANATHAN COLLEGE OF ENGINEERING			
Name of the Head of the institution	DR. D.VALAVAN			
Designation	PRINCIPAL			
Does the institution function from its own campus?	Yes			
Phone no./Alternate phone no.	8489915201			
Mobile no	9488488537			
Registered e-mail	principal@saranathan.ac.in			
Alternate e-mail	secretary@saranathan.ac.in			
• Address	VENKATESWARA NAGAR PANJAPPUR, EDAMALAIPATTI PUDUR POST			
• City/Town	TIRUCHIRAPPALLI			
• State/UT	TAMILNADU			
• Pin Code	620012			
2.Institutional status				
Affiliated /Constituent	AFFILIATED			
• Type of Institution	Co-education			
• Location	Urban			
• Financial Status	Self-financing			
Name of the Affiliating University	ANNA UNIVERSITY CHENNAI			
Name of the IQAC Coordinator	Dr. C KRISHNAKUMAR			

• Phone No.				848991	.5207				
Alternate phone No.									
• Mobile				9500978151					
• IQAC e-1	mai	1 address			iqacco	ordi	nator@s	saraı	nathan.ac.in
Alternate Email address				krishnakumar- eee@saranathan.ac.in					
3.Website address (Web link of the AQAR (Previous Academic Year)									
4.Whether Acad during the year		nic Calendar	· prepa	ared	Yes	Yes			
		ner it is uploa		the					c.in/home.ph
Institutio	nal	website Web	link:		p?tgt=	eve_	writeur	eic	<u>1=315</u>
5.Accreditation	De	etails				7			
Cycle	Gı	rade	nde CGPA		Year of Accredit	ation	Validity from		Validity to
Cycle 1		A+	A+ 3.27		2023	1	19/04/	/202	18/04/202
6.Date of Establishment of IQAC				03/10/2019					
7.Provide the list of funds by Central / State G UGC/CSIR/DBT/ICMR/TEQIP/World Bank/					c.,				
Institutional/De artment /Facult	- 1	Scheme		Funding	Agency		of award duration	A	Amount
Nil		Nil		Ni	.1		Nil		Nil
8.Whether composition of IQAC as per latest NAAC guidelines				Yes					
Upload latest notification of formation of IQAC				View File	<u>e</u>				
9.No. of IQAC meetings held during the year				3					
Were the minutes of IQAC meeting(s) and compliance to the decisions have been uploaded on the institutional				Yes					

website?			
If No, please upload the minutes of the meeting(s) and Action Taken Report	No File Uploaded		
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If yes, mention the amount			
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13.Whether the AQAR was placed before statutory body?	No		
Name of the statutory body			
Name	Date of meeting(s)		
Nil	Nil		
14.Whether institutional data submitted to AI	SHE		
Year	Date of Submission		
2020 10/01/2020			
15.Multidisciplinary / interdisciplinary			
16.Academic bank of credits (ABC):			
17.Skill development:			
18.Appropriate integration of Indian Knowled culture, using online course)	lge system (teaching in Indian Language,		
19.Focus on Outcome based education (OBE):	Focus on Outcome based education (OBE):		

20.Distance education/online education:				
Extende	d Profile			
1.Programme				
1.1		523		
Number of courses offered by the institution across all programs during the year				
File Description	Documents			
Data Template		<u>View File</u>		
2.Student				
2.1		2486		
Number of students during the year				
File Description Documents				
Institutional Data in Prescribed Format		<u>View File</u>		
Institutional Data in Prescribed Format 2.2		<u>View File</u> 396		
	as per GOI/			
2.2 Number of seats earmarked for reserved category	as per GOI/			
2.2 Number of seats earmarked for reserved category State Govt. rule during the year				
2.2 Number of seats earmarked for reserved category State Govt. rule during the year File Description		396		
2.2 Number of seats earmarked for reserved category State Govt. rule during the year File Description Data Template	Documents	396 View File		
2.2 Number of seats earmarked for reserved category State Govt. rule during the year File Description Data Template 2.3	Documents	396 View File		
2.2 Number of seats earmarked for reserved category State Govt. rule during the year File Description Data Template 2.3 Number of outgoing/ final year students during the	Documents ne year	396 View File		
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Number of full time teachers during the year			
File Description Documents			
Data Template N		o File Uploaded	
3.2		149	
Number of sanctioned posts during the year			
File Description Documents			
Data Template		View File	
4.Institution			
4.1		60	
Total number of Classrooms and Seminar halls			
4.2		591.900	
Total expenditure excluding salary during the yea	r (INR in lakhs)		
4.3		699	
Total number of computers on campus for acaden	nic purposes		

Part B

CURRICULAR ASPECTS

1.1 - Curricular Planning and Implementation

- 1.1.1 The Institution ensures effective curriculum delivery through a well planned and documented process
 - The college being affiliated to Anna University, Chennai, strictly adheres to the curriculum, regulations and follows the syllabus of each course in each Programme, semester academic planner are framed by the Institution.
 - The allocation of each course to the faculty members is based on their willingness and finalized by HoD on the basis of faculty's technical skill, competency level, experience, students' feedback and academic performance.
 - At the beginning of every Semester, Course Committee Meeting is organized, and the Course handlers plan their lesson plan/lecture & practical schedule with Course Outcomes, Assignments, content beyond syllabus.
 - Bridge course is planned for the first year students to

- educate them about the environment and culture of the institution.
- Course delivery is carried out online and offline as per the lesson plan/lecture schedule and it is recorded in the course log book.
- The Academic performance of the Students is measured and monitored through Online Centralized Internal Assessment Tests and Class Committee Meetings are conducted to encourage the students to improve their academic performance and other skills.
- Course Outcome Survey, Students' feedback is obtained from all the students for all the courses at the end of the semester.

File Description	Documents
Upload relevant supporting document	<u>View File</u>
Link for Additional information	https://saranathan.ac.in/IQAC/AQAR2021/C1 1_1.pdf

1.1.2 - The institution adheres to the academic calendar including for the conduct of Continuous Internal Evaluation (CIE)

- Academic planner is prepared by a team of senior Faculty members in consultation with Principal, Dean (S&H), Dean (R&D) and HoDs.
- Followed by, the department academic planner is framed by incorporating co-curricular activities, faculty meeting with HOD, Mentor-Mentee Meeting, Class Committee Meeting, Internal Assessment Test series and Question paper, review of course file, course log book submission dates.
- Schedule for IAT tests is announced and displayed in advance by Principal.
- The College has an Exam Cell and it holds the responsibility for all exam related activities.
- The question papers are set to test various cognitive levels of the student as per Bloom's Taxonomy.
- A detailed scheme of evaluation is prepared for every course prior to start of evaluation of the answer scripts.
- The answer scripts are issued to the students to verify the scheme of evaluation with the marks awarded by the course handlers.
- Complete transparency is ensured while returning the answer

- books to the students; the marks are entered in the institution web portal to display the performance of students.
- The continuous evaluation process provides more opportunities to get feedback of the progress of the students.

File Description	Documents
Upload relevant supporting document	<u>View File</u>
Link for Additional information	https://saranathan.ac.in/IQAC/AQAR2021/C1 1 2.pdf

1.1.3 - Teachers of the Institution participate in following activities related to curriculum development and assessment of the affiliating University and/are represented on the following academic bodies during the year. Academic council/BoS of Affiliating University Setting of question papers for UG/PG programs Design and Development of Curriculum for Add on/ certificate/ Diploma Courses Assessment /evaluation process of the affiliating University

B. Any 3 of the above

File Description	Documents
Details of participation of teachers in various bodies/activities provided as a response to the metric	<u>View File</u>
Any additional information	<u>View File</u>

1.2 - Academic Flexibility

- 1.2.1 Number of Programmes in which Choice Based Credit System (CBCS)/ elective course system has been implemented
- 1.2.1.1 Number of Programmes in which CBCS/ Elective course system implemented

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

1.2.2 - Number of Add on /Certificate programs offered during the year

1.2.2.1 - How many Add on /Certificate programs are added during the year. Data requirement for year: (As per Data Template)

8

File Description	Documents
Any additional information	<u>View File</u>
Brochure or any other document relating to Add on /Certificate programs	<u>View File</u>
List of Add on /Certificate programs (Data Template)	<u>View File</u>

1.2.3 - Number of students enrolled in Certificate/ Add-on programs as against the total number of students during the year

508

File Description	Documents
Any additional information	<u>View File</u>
Details of the students enrolled in Subjects related to certificate/Add-on programs	<u>View File</u>

1.3 - Curriculum Enrichment

- 1.3.1 Institution integrates crosscutting issues relevant to Professional Ethics, Gender, Human Values, Environment and Sustainability into the Curriculum
 - Equal opportunities are given to both the genders in terms of admissions, employment, co-curricular and extracurricular activities etc
 - The Institute has constituted various committees including Sexual Harassment Redressal committee, Women Empowerment Cell, Women Redressal Cell and grievance Redressal committee

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to promote gender equity and also deal with related issues of safety and security of girl students, ladies staff and faculties.

- All programs have a compulsory course on Environmental Science and Engineering in First /Second year curriculum to study basic components of environment and its application to tackle issues such as pollution control, green gases etc.
- Students opt as electives from Environment and sustainability, Disaster Management, Air Pollution and Control Engineering, Transport and Environment, Environmental and Social Impact Assessment.
- Many Projects are undertaken by students relating to environmental and Sustainability issues like climate change, water pollution, sewage treatment, air pollution, rain water harvesting, runoff modeling, flood prediction, green concrete, materials, energy conservation etc.
- In order to integrate the cross cutting issues relevant to human values and professional ethics, Anna University has included different types of courses in the curriculum and creates awareness on business ethics and human values among students.

File Description	Documents
Any additional information	<u>View File</u>
Upload the list and description of courses which address the Professional Ethics, Gender, Human Values, Environment and Sustainability into the Curriculum.	<u>View File</u>

1.3.2 - Number of courses that include experiential learning through project work/field work/internship during the year

File Description	Documents
Any additional information	<u>View File</u>
Programme / Curriculum/ Syllabus of the courses	<u>View File</u>
Minutes of the Boards of Studies/ Academic Council meetings with approvals for these courses	<u>View File</u>
MoU's with relevant organizations for these courses, if any	<u>View File</u>
Institutional Data in Prescribed Format	<u>View File</u>

1.3.3 - Number of students undertaking project work/field work/ internships

1191

File Description	Documents
Any additional information	<u>View File</u>
List of programmes and number of students undertaking project work/field work//internships (Data Template)	<u>View File</u>

1.4 - Feedback System

1.4.1 - Institution obtains feedback on the syllabus and its transaction at the institution from the following stakeholders Students Teachers Employers Alumni

A. All of the above

File Description	Documents
URL for stakeholder feedback report	https://saranathan.ac.in/IQAC/AQAR2021/C1_ 4_1.pdf
Action taken report of the Institution on feedback report as stated in the minutes of the Governing Council, Syndicate, Board of Management	<u>View File</u>
Any additional information	<u>View File</u>

1.4.2 - Feedback process of the Institution may be classified as follows

B. Feedback collected, analyzed and action has been taken

File Description	Documents
Upload any additional information	<u>View File</u>
URL for feedback report	https://saranathan.ac.in/IQAC/AQAR2021/C1_ 4_2.pdf

TEACHING-LEARNING AND EVALUATION

2.1 - Student Enrollment and Profile

2.1.1 - Enrolment Number Number of students admitted during the year

2.1.1.1 - Number of students admitted during the year

535

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 seats reserved for various categories (SC, ST, OBC, Divyangjan, etc. as per applicable reservation policy during the year (exclusive of supernumerary seats)

2.1.2.1 - Number of actual students admitted from the reserved categories during the year

459

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 the learning levels of the students and organizes special Programmes for advanced learners and slow learners

The learning levels of the students are assessed based on the performance of the students in the Internal Assessment tests and also based on their CGPA in the university examinations. The

Students are categorized as advanced learners, Average and slow learners. Due to pandemic the classes were conducted through Google Class rooms (online mode) and the tests are also conducted through online platform.

Bridge Course / Induction program addresses the psychological impact of the change in learning methodology from school to college. Bridge courses are conducted for one week (online mode) for the first year newly admitted students on the topics of Foundation courses in the subjects such as English, Mathematics, Physics and Chemistry, Communication skills, Programming skills and Extra-curricular activities.

Soft skills training, software training programs on Lab view for CLAD were conducted along with the counseling and motivation by mentors to the mentees. Students were encouraged to participate British English, NPTEL certification courses. Students participated in the online Internship offered by companies. Since most of the classes are online classes, the slow learners identified before pandemic were provided with study materials such as questions and answers for scoring two marks.

File Description	Documents
Paste link for additional information	http://www.saranathan.ac.in/IQAC/AQAR2021/ C2_2_1.pdf
Upload any additional information	<u>View File</u>

2.2.2 - Student- Full time teacher ratio (Data for the latest completed academic year)

Number of Students	Number of Teachers
2486	149

File Description	Documents
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

Our Institute has deployed several practices for active participation of students in the Teaching-Learning Process.

Suchstudent centric methods which yielded good results are listed below.

Experiential learning

- Guest Lectures and workshops by experts from industry and academia are arranged through online platforms for students to enhance their knowledge in various emerging topics.
- Skill Improvement Programmes followed by Certification such as CLAD, NPTEL Certification courses on Labview.
- Presenting papers in the conferences (online) by referring standard journals such as IEEE, Springer, Elsevier, etc.
- Opportunities to take up Internships such as company specific training in MRF, E-Con, Infosys, Vuram, Hack with Infy etc.,

Participative Learning

• Youtube Channels and Blogs have been created for uploading the study materials to provide 24/7 access to knowledge. Test questions are prepared by the students and circulated randomly through their forums.

Problem Solving Methodologies

- Participation in Hackathons, Virtual Engineering project Contests (conducted by private corporations as well as the Government under the title Smart India Hackathon), Design of Electrical Vehicle Competitions helps in enhancing the problem solving and Analytical skills of students.
- Aptitude and Programming Training, Internship opportunities empower the students to enhance their learn-by-doing skills.

File Description	Documents
Upload any additional information	<u>View File</u>
Link for additional information	http://www.saranathan.ac.in/IQAC/AQAR2021/ C2_3_1.pdf

2.3.2 - Teachers use ICT enabled tools for effective teaching-learning process. Write description in maximum of 200 words

• Information & Communications Technology (ICT) enabled teaching methodologies was a boon for the faculty members

- during pandemic period. Multimedia teaching aids such as iPads, writing / graphical Tablets with internet enabled computer/laptops are used by the faculty members for better illustration of concepts.
- Informative tools are the applications/ digital resources available on internet that provide information in multimedia formats. Communicative tools such as Google Class rooms, Official Whatsapp groups, Group mail IDs facilitate communication between the teacher and their students. ICTs arouse interest among students and encourage them to adopt à new way of acquiring in- depth knowledge and developing skills.
- The online course materials of NPTEL, materials provided through other online resources are made available in the Digital Library.
- At regular intervals, the faculty members effectively utilize Audio Visual aids to laboratory experiments to the students.
- Online access to the refereed journals, e- books and ejournals are made as part of Learning Management Systems (LMS) was provided to the students trough Faculty members.
- Online workshops and guest lectures on the recent technology
 -developments, online training programs by thedepartment ofT
 & P for effective teaching and learning by the faculty
 members and students.

File Description	Documents
Upload any additional information	<u>View File</u>
Provide link for webpage describing the ICT enabled tools for effective teaching-learning process	<u>View File</u>

2.3.3 - Ratio of mentor to students for academic and other related issues (Data for the latest completed academic year)

2.3.3.1 - Number of mentors

File Description	Documents
Upload, number of students enrolled and full time teachers on roll	<u>View File</u>
Circulars pertaining to assigning mentors to mentees	<u>View File</u>
Mentor/mentee ratio	<u>View File</u>

2.4 - Teacher Profile and Quality

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

149

File Description	Documents
Full time teachers and sanctioned posts for year (Data Template)	<u>View File</u>
Any additional information	No File Uploaded
List of the faculty members authenticated by the Head of HEI	<u>View File</u>

2.4.2 - Number of full time teachers with Ph. D. / D.M. / M.Ch. /D.N.B Superspeciality / D.Sc. / D.Litt. during the year (consider only highest degree for count)

2.4.2.1 - Number of full time teachers with Ph. D. / D.M. / M.Ch. /D.N.C Superspeciality / D.Sc. / D.Litt. during the year

54

File Description	Documents
Any additional information	<u>View File</u>
List of number of full time teachers with Ph. D. / D.M. / M.Ch./ D.N.B Super specialty / D.Sc. / D.Litt. and number of full time teachers for year (Data Template)	<u>View File</u>

2.4.3 - Number of years of teaching experience of full time teachers in the same institution (Data for the latest completed academic year)

2.4.3.1 - Total experience of full-time teachers

1322

File Description	Documents
Any additional information	<u>View File</u>
List of Teachers including their PAN, designation, dept. and experience details(Data Template)	<u>View File</u>

2.5 - Evaluation Process and Reforms

2.5.1 - Mechanism of internal assessment is transparent and robust in terms of frequency and mode. Write description within 200 words.

Theory Courses

- Three Internal Assessment Tests are conducted for every semester. The schedule is declared in the Academic Calendar shared with the students.
- Two question papers are set along with the course outcomes and as per appropriate levels based on Blooms Taxonomy where the best question paper is selected by the HoD.
- Due to Pandemic, the internal exams were conducted through online platforms with the video cameras were on.
- An Audit report is prepared by the QIC on the test papers evaluation.

Practical Courses

 Based on the student performance in the model exam conducted, the internal marks for the laboratory courses are entered in the web portal of Anna University.

Project Work

- The final year student's projects are selected in line with department mission, vision and Program outcomes.
- Students are provided of various fields for selecting the project ideas. Students are given choice to choose their guide based on the specialized area of faculty members.
- Students select a topic of his/her interest and then perform literature survey, formulate the problem formally and then implement it.
- Students are encouraged in the project reviews to publish their project work in reputed journals/conferences.

File Description	Documents
Any additional information	<u>View File</u>
Link for additional information	
	http://www.saranathan.ac.in/IQAC/AQAR2021/
	<u>C2 5 1.pdf</u>

2.5.2 - Mechanism to deal with internal examination related grievances is transparent, time-bound and efficient

As per Anna University (AU) requirements, a profile must be created for every student to maintain the database in AU-Web portal for further process. The grievances related to profile correction/change will be made as when required. Exam Cell steps in and help resolve issues related to name, date of birth correction in Grade sheets and other documents. Any grievances, related to applying for photocopy of the valued answer script, "revaluation" and "review revaluation", is addressed by Exam Cell as and when required. The database maintained as per AU requirements is considered as the only relevant reference for evaluating whether a student meets the eligibility criteria set down by any external agency (like eligibility to participate in placement drives conducted by various companies)

Three Internal Assessments Test marks from all the departments are entered in the AU-Web portal as per entry period given by AU. Grievances related to AU-Web portal in displaying the marks scored by the students are addressed immediately.

File Description	Documents
Any additional information	<u>View File</u>
Link for additional information	
	http://www.saranathan.ac.in/IQAC/AQAR2021/
	<u>C2 5 2.pdf</u>

2.6 - Student Performance and Learning Outcomes

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

A successful outcome-based curriculum involves aligning the individual Course Outcome (CO) with the intended Program Outcomes (POs) and with Program Specific Outcomes (PSOs). The CO-PO mapping paves the way to examining the extent to which the outcomes are assessed in the curriculum. The department has defined its own

PEOs and PSOs in alignment with Program Outcomes described by University curriculum and feedback from Industry experts.

Five or six Course outcomes of each course are formed by the department faculty mapping them with PSO and PO. PO, PSO & COs are displayed in the website and that too department wise. In the Course committee meeting conducted with the subject experts and Head of the department, the faculty members will put forth the course outcomes for their subjects and fine tune them before the beginning of each semester.

The COs are included in the logbooks and the intranet portal of the institution along with mapping s. COs are disseminated to the students on the introductory classes of each course. Also COs are recalled by the faculty members during classes before the beginning of each unit in the subject. Course Outcomes are specified in test question papers, Assignments and Tutorial Problem worksheets.

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for Additional information	http://saranathan.ac.in/IQAC/AQAR2021/C2_6 _1.pdf
Upload COs for all Programmes (exemplars from Glossary)	<u>View File</u>

2.6.2 - Attainment of Programme outcomes and course outcomes are evaluated by the institution.

The direct attainment of each CO is calculated based on the ratio of 60 % from external examinations (by taking the percentage of students who have scored above the set target) and 40% through internal examinations. The indirect attainment is obtained from student's survey depending on the percentage of attainment.

A correlation matrix of COs of each course with POs and PSOs is created. The direct attainment of each POs and PSOs from internal and university examinations and average of all POs and PSOs are calculated using the matrix. The expected PO attainment level is fixed as 3, 2 or 1.

A graduate exit survey and an alumni survey on each PO are collected. From 80 % of the attainment through direct assessment and 20% Attainment through indirect assessment, the overall

attainment is determined.

This procedure is followed for all academic years. If the set target of COs is not achieved, then the process is repeated. If it is achieved, then it is revised to a higher value. If the target set for POs and PSOs attainment is achieved then the target is revised to a higher value and repeated, else, corrective measures are implemented.

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for Additional information	http://saranathan.ac.in/IQAC/AQAR2021/C2 6 2.pdf

2.6.3 - Pass percentage of Students during the year

2.6.3.1 - Total number of final year students who passed the university examination during the year

729

File Description	Documents
Upload list of Programmes and number of students passed and appeared in the final year examination (Data Template)	<u>View File</u>
Upload any additional information	<u>View File</u>
Paste link for the annual report	https://saranathan.ac.in/IQAC/AQAR2021/C2_6_3_b1.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://saranathan.ac.in/IOAC/AOAR2021/C2 7 1.pdf

RESEARCH, INNOVATIONS AND EXTENSION

3.1 - Resource Mobilization for Research

3.1.1 - Grants received from Government and non-governmental agencies for research

projects / endowments in the institution during the year (INR in Lakhs)

3.1.1.1 - Total Grants from Government and non-governmental agencies for research projects / endowments in the institution during the year (INR in Lakhs)

16.60743

File Description	Documents
Any additional information	<u>View File</u>
e-copies of the grant award letters for sponsored research projects /endowments	<u>View File</u>
List of endowments / projects with details of grants(Data Template)	<u>View File</u>

3.1.2 - Number of teachers recognized as research guides (latest completed academic year)

3.1.2.1 - Number of teachers recognized as research guides

18

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

3.1.3 - Number of departments having Research projects funded by government and non government agencies during the year

3.1.3.1 - Number of departments having Research projects funded by government and nongovernment agencies during the year

File Description	Documents
List of research projects and funding details (Data Template)	<u>View File</u>
Any additional information	<u>View File</u>
Supporting document from Funding Agency	<u>View File</u>
Paste link to funding agency website	https://www.aicte-india.org/schemes/instit utional-development-schemes

3.2 - Innovation Ecosystem

3.2.1 - Institution has created an ecosystem for innovations and has initiatives for creation and transfer of knowledge

The institution provided adequate ambience for students and faculty to explore areas of technological advancements with the pandemic period drastically transforming skill enhancement in a broader perspective. Technical webinars on data management sciences like Cloud Computing and Big data Analytics conducted by the DELL EMC Centre of Excellence provided an excellent platform for staff and students to get trained in this advanced technology. Microsoft Certification Programme (MCP), Microsoft Technical Associate Certification (MTA), INFOSYS CAMPUS CONNECT etc. continue to produce qualified and industry -ready software professionals.

A range of CAD/CAM/CAE software like AUTODESK Inventor, SOLIDWORKS, CREO, EDGECAM and ANSYS, encourage project ventures in contemporary areas of design, modeling, and analysis. An STTPconducted on Rudiments and Practices in Computational Fluid Dynamics provided a platform to interact with subjectexperts from premier institutions and PSUsencouraging research in this area. AUTOMATION STUDIO and SIMCENTRE-AMESIM softwarefacilitate multidisciplinary learning platforms. The Advanced Power System Research Laboratory hosted a FDP on Novel Design and Innovative practices in Switchgear technology, facilitating rich information exchange from across the countryon advanced practices.

The institution's Quality Improvement Cell (QIC) aims at improving learning ability of students through open access e-resources and an upgraded digital library.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	http://saranathan.ac.in/IOAC/AOAR2021/C3_2 1.pdf

- 3.2.2 Number of workshops/seminars conducted on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship during the year
- 3.2.2.1 Total number of workshops/seminars conducted on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship year wise during the year

File Description	Documents
Report of the event	<u>View File</u>
Any additional information	<u>View File</u>
List of workshops/seminars during last 5 years (Data Template)	<u>View File</u>

3.3 - Research Publications and Awards

3.3.1 - Number of Ph.Ds registered per eligible teacher during the year

3.3.1.1 - How many Ph.Ds registered per eligible teacher within the year

64

File Description	Documents
URL to the research page on HEI website	https://www.saranathan.ac.in/center.php?tg t=scerc
List of PhD scholars and their details like name of the guide, title of thesis, year of award etc (Data Template)	<u>View File</u>
Any additional information	<u>View File</u>

3.3.2 - Number of research papers per teachers in the Journals notified on UGC website during the year

3.3.2.1 - Number of research papers in the Journals notified on UGC website during the year

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

- 3.3.3 Number of books and chapters in edited volumes/books published and papers published in national/international conference proceedings per teacher during the year
- 3.3.3.1 Total number of books and chapters in edited volumes/books published and papers in national/international conference proceedings year wise during year

100

File Description	Documents
Any additional information	<u>View File</u>
List books and chapters edited volumes/ books published (Data Template)	<u>View File</u>

3.4 - Extension Activities

3.4.1 - Extension activities are carried out in the neighborhood community, sensitizing students to social issues, for their holistic development, and impact thereof during the year

The NATIONAL SERVICE SCHEME (NSS) unit of our college conducts Personality / Character Development Programmes as mandated by Anna University Regulations. Activities like Career Guidance Programs, Tree plantation, five day village adoption camp etc are conducted. The unit has been recognized as the best among affiliated colleges, by Anna University (Award received on 20/09/2020).

YOUTH RED CROSS (YRC) Unit of the institution is actively involved in campus cleaning, awareness programmes regarding dengue fever, rain water harvesting methods, campaign against plastic usage etc.

RED RIBBON CLUB (RRC) of the institution conducts blood donation camps, free health check-up camps, AIDS awareness and orientation programmes.

ECO CLUB of the institution actively involves staff and students in aggressive tree planting initiatives to transform the campus into a green shield.

WOMEN EMPOWERMENT CELL aims at empowering girl students and women faculty through various initiatives, like invited talks by leading career women from various walks of life, awareness on safety, health, career and self employment aspects.

The Institution is a centre for conducting competitive/ recruitment examinations like NEET, TNPSC and storage, as well as counting of Electronic voting machines (EVM's) for State Assembly and Parliament Elections.

File Description	Documents
Paste link for additional information	http://saranathan.ac.in/IQAC/AQAR2021/C3_4 _1.pdf
Upload any additional information	<u>View File</u>

- 3.4.2 Number of awards and recognitions received for extension activities from government / government recognized bodies during the year
- 3.4.2.1 Total number of awards and recognition received for extension activities from Government/ Government recognized bodies year wise during the year

3

File Description	Documents
Any additional information	<u>View File</u>
Number of awards for extension activities in last 5 year (Data Template)	<u>View File</u>
e-copy of the award letters	<u>View File</u>

- 3.4.3 Number of extension and outreach programs conducted by the institution through NSS/NCC/Red cross/YRC etc., (including the programmes such as Swachh Bharat, AIDS awareness, Gender issues etc. and/or those organized in collaboration with industry, community and NGOs) during the year
- 3.4.3.1 Number of extension and outreach Programs conducted in collaboration with industry, community and Non- Government Organizations through NSS/ NCC/ Red Cross/ YRC etc., during the year

7

File Description	Documents
Reports of the event organized	<u>View File</u>
Any additional information	<u>View File</u>
Number of extension and outreach Programmes conducted with industry, community etc for the during the year (Data Template)	<u>View File</u>

3.4.4 - Number of students participating in extension activities at 3.4.3. above during year

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3.4.4.1 - Total number of Students participating in extension activities conducted in collaboration with industry, community and Non- Government Organizations such as Swachh Bharat, AIDs awareness, Gender issue etc. year wise during year

174

File Description	Documents
Report of the event	<u>View File</u>
Any additional information	<u>View File</u>
Number of students participating in extension activities with Govt. or NGO etc (Data Template)	<u>View File</u>

3.5 - Collaboration

- 3.5.1 Number of Collaborative activities for research, Faculty exchange, Student exchange/internship during the year
- 3.5.1.1 Number of Collaborative activities for research, Faculty exchange, Student exchange/ internship year wise during the year

32

File Description	Documents
e-copies of related Document	<u>View File</u>
Any additional information	<u>View File</u>
Details of Collaborative activities with institutions/industries for research, Faculty	View File

- 3.5.2 Number of functional MoUs with institutions, other universities, industries, corporate houses etc. during the year
- 3.5.2.1 Number of functional MoUs with Institutions of national, international importance, other universities, industries, corporate houses etc. year wise during the year

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

Saranathan College of Engineering established in the year 1998 is one among top 20 colleges in Tamil Nadu. The college is situated in a sprawling 20.43acre campus. SCE has a well established infrastructure with well equipped Classrooms and laboratories as per AICTE specifications. To prepare the students to industry expectations, the college has fully equipped industry tie-up laboratories like E-Yantra Robotics Lab, Infosys campus connect Lab, National Instruments Research Lab and Communication lab. The number and area of the class rooms and equipments in the Labs meet the AICTE norms. SWAYAM-NPTEL, MOOCS and internet resources help in self-learning to interested students. Each department has separate Seminar Halls with ICT enabled facilities. Special facilities have been provided for physically challenged students' such as ramps, lifts, wash room, relocation (if needed) of class rooms, wheel chairs, special attention and counseling where needed. More than 800 desktop computers are available in different departments and laboratories with 1000/100Mbps LAN connectivity to carry out academic and administrative work. The hostels have an area of 3,754sq.m for boys and 5,600sq.m. for girls with Wi-Fi, gymnasium, library, ambulance service etc. Well maintained transport facilities to day scholars. A City union bank ATM facility also provided insidecampus.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://saranathan.ac.in/IQAC/AQAR2021/C4_ 1_1.pdf

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

SCE encourages sports activities and gives importance to pursuing excellence in sports. The sports infrastructure comprises facilities for indoor and outdoor games. There are well maintained outdoor grounds for Cricket, Football, Tennis, Basket ball, Volley ball, Hockey, Athletics and gym for boys. A separate sports area for field events like Shot put, Kho-Kho, etc., There are also dedicated spaces for Table Tennis, Weight/Power Lifting, Chess, and Carrom. The College also rewards with scholarships outstanding achievers in sports. Students are encouraged to participate in various Zonal, Inter Zonal, State, National and International Level Tournaments. Such participation is ensured by hosting such National Sports Events in the campus on grounds that meet the exacting requirements of such National Sports Associations. The Management is committed to providing these participants with all necessary facilities. Yoga sessions are arranged, for the students, by the Separate yoga trainers for boys and girls.

Cultural Events: Students possessing talent in cultural activities are encouraged to perform in various events and encourage taking part in extra-curricular activities. A cultural fest and a talent show in the names of "SAARAL" and "Margazhi Maha Utsav" are aimed at bringing out the talents of student community and showcasing our heritage arts.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://saranathan.ac.in/IQAC/AQAR2021/C4 1 2.pdf

4.1.3 - Number of classrooms and seminar halls with ICT- enabled facilities such as smart class, LMS, etc.

17

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://saranathan.ac.in/IQAC/AQAR2021/C4_ 1_3.pdf
Upload Number of classrooms and seminar halls with ICT enabled facilities (Data Template)	<u>View File</u>

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

4.1.4.1 - Expenditure for infrastructure augmentation, excluding salary during the year (INR in lakhs)

78.44

File Description	Documents
Upload any additional information	<u>View File</u>
Upload audited utilization statements	<u>View File</u>
Upload Details of budget allocation, excluding salary during the year (Data Template	<u>View File</u>

4.2 - Library as a Learning Resource

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

Library is fully automated and In-house software used for Circulation, Procurement, Reservation, OPAC (Online Public Access Catalog), Project Reports and Question papers. All the library documents are bar- coded and books are issued to users by reading the barcode of the document. In-house software is very versatile and is extensively used for generating all the reports that are required in day to day administration of the Library.

Library Networking [Intranet and Internet]

Since the Library is fully automated, the holdings of the Library

could be searched using OPAC. The holdings include the books and Journals, syllabus, question papers and Project reports.

For the last 10 years the library is a member of the IEEE and ASME. The Library has internet facility through which the eresources can be accessed. On an average around 150 students per day make use of the Library resources. The users of the Library can access publications of all major publishers like Springer, ASME, IEEE, etc. The users can access around 5,000 e-books and 241 International journals. The Central Library is also a member of National Digital Library (NDL) which has a collection of more than 6 lakh e- books which the students and staff are making use of it. The journals that are being subscribed are bound as back volumes. There are about 101 titles and 3153 bound volumes. Library also maintains Project reports that are submitted by the students as part of their course curriculum are being used extensively by the student community. The Digital Library has 30 systems through which Students can access the available e-content.

Reprography and Scanners facility

A high-end Canon Xerox machine, that has the facilities like copying, scanning, and printing, is available in the library.

Library Classification and Cataloguing in Standard Classification format.

Library is making use of Dewey Decimal Classification (23rd edition) for all its documents. For cataloguing the library is making use of MARC II format.

Open Access of arrangement of Print and Non-book materials

Right from the inception of the Library, it is following the open access to all its documents housed in it that includes books:
Bound volumes, reports and other reading material. The library has good bay guides which helps the readers to easily locate the books and other reading material even without the help of Library staff. The departmental books are arranged subject-wise and an index is pasted on each rack.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for Additional Information	https://saranathan.ac.in/IQAC/AQAR2021/C4_ 2_1.pdf

4.2.2 - The institution has subscription for the A. Any 4 or more of the above following e-resources e-journals e-ShodhSindhu Shodhganga Membership e-

books Databases Remote access toe-resources

File Description	Documents
Upload any additional information	<u>View File</u>
Details of subscriptions like e- journals,e-ShodhSindhu, Shodhganga Membership etc (Data Template)	<u>View File</u>

- 4.2.3 Expenditure for purchase of books/e-books and subscription to journals/e- journals during the year (INR in Lakhs)
- 4.2.3.1 Annual expenditure of purchase of books/e-books and subscription to journals/e-journals during the year (INR in Lakhs)

10.46

File Description	Documents
Any additional information	<u>View File</u>
Audited statements of accounts	<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 Number per day usage of library by teachers and students (foot falls and login data for online access) (Data for the latest completed academic year)
- 4.2.4.1 Number of teachers and students using library per day over last one year

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

4.3 - IT Infrastructure

4.3.1 - Institution frequently updates its IT facilities including Wi-Fi

All departments and laboratories are connected through L3 and L2 switches with ring topology. All the computers are connected over LAN and to the data centre through 59GB network switches. 175Mbps Internet connectivity is shared across the campus, where 150Mbps is shared for the students.

Data centre is working 24x7 without any interruption. Computers are protected from virus and other threats using Sophos hardware firewall. Data centre supported with uninterrupted power supply. Windows volume license, MS office, visual-studios, MS SQL server, Oracle, Rational suite enterprise, SPSS, MATLAB, ORCAD, ADS, NS2, Pspice, Labview, Cadence, E-pro licenses, open source operating systems such as Ubuntu, CentOS, Fedora etc. and also some open source softwares are used by different departments and protected with K7 Endpoint security and 360 Total security.

Wi-Fi access is provided to the students and faculty. Individual Wi-Fi access point is operative in each block. Additional Wi-Fi access points have been created in various places such as library, hostels and administrative buildings. All access points are routed to Unify Wi-Fi controller in the data centre where configuration and updates are maintained in a centralized fashion.

Updates are maintained regularly through Windows Server Update Service(WSUS) and anti-viruses are updated through cloud portal

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://saranathan.ac.in/IOAC/AOAR2021/C4 3 1.pdf

4.3.2 - Number of Computers

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

4.3.3 - Bandwidth of internet connection in A. ? 50MBPS the Institution

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

4.4 - Maintenance of Campus Infrastructure

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

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

513.46

File Description	Documents
Upload any additional information	<u>View File</u>
Audited statements of accounts	<u>View File</u>
Details about assigned budget and expenditure on physical facilities and academic support facilities (Data Templates)	<u>View File</u>

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

The laboratories are furnished, relevant safety precautions are displayed in each laboratory. Separate registers maintained for stock, break down service and maintenance. Regular cleaning of the machines, break down services and instruments are calibrated periodically. Consumables are purchased every six months. Safety aids are provided wherever necessary.

Classrooms

The classroom furniture, Projectors and equipments are checked periodically and maintained properly. The cleaning of class room is done every day.

Sports

Regular maintenance of the play area and the sports facilities is under the supervision of Physical education director. If any damage is observed, the same is recorded in the register and further action taken.

IT

Hardware trouble shooting, software installation, Maintaining Biometric devices and network related issues are monitored and maintained by IT help desk. The complaints posted through E-mail are addressed and resolved immediately.

Library

There is regular stock verification process carried out. Library advisory committee helps in guiding the library and meets at regular intervals for selection of books and materials. Books which are in circulation can be reserved and it will not be renewed and reissued. If the books are lost, then the borrower, after getting the approval of the Principal, replaces the books or pay double

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	http://saranathan.ac.in/IQAC/AQAR2021/C4_4 _2.pdf

STUDENT SUPPORT AND PROGRESSION

5.1 - Student Support

- 5.1.1 Number of students benefited by scholarships and free ships provided by the Government during the year
- 5.1.1.1 Number of students benefited by scholarships and free ships provided by the Government during the year

1064

File Description	Documents
Upload self attested letter with the list of students sanctioned scholarship	<u>View File</u>
Upload any additional information	<u>View File</u>
Number of students benefited by scholarships and free ships provided by the Government during the year (Data Template)	<u>View File</u>

5.1.2 - Number of students benefitted by scholarships, free ships etc. provided by the institution / non- government agencies during the year

5.1.2.1 - Total number of students benefited by scholarships, free ships, etc provided by the institution / non- government agencies during the year

8

File Description	Documents
Upload any additional information	<u>View File</u>
Number of students benefited by scholarships and free ships institution / non- government agencies in last 5 years (Date Template)	<u>View File</u>

5.1.3 - Capacity building and skills enhancement initiatives taken by the institution include the following: Soft skills Language and communication skills Life skills (Yoga, physical fitness, health and hygiene) ICT/computing skills

A. All of the above

File Description	Documents
Link to Institutional website	https://assessmentonline.naac.gov.in/stora ge/app/public/agar/14931/14931_149_360.pdf ?1646633632
Any additional information	<u>View File</u>
Details of capability building and skills enhancement initiatives (Data Template)	<u>View File</u>

5.1.4 - Number of students benefitted by guidance for competitive examinations and career counseling offered by the institution during the year

2035

5.1.4.1 - Number of students benefitted by guidance for competitive examinations and career counseling offered by the institution during the year

2035

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 has a transparent mechanism for timely redressal of student grievances including sexual harassment and ragging cases Implementation of guidelines of statutory/regulatory bodies Organization wide awareness and undertakings on policies with zero tolerance Mechanisms for submission of online/offline students' grievances Timely redressal of the grievances through appropriate committees

A. All of the above

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

5.2 - Student Progression

5.2.1 - Number of placement of outgoing students during the year

5.2.1.1 - Number of outgoing students placed during the year

323

File Description	Documents
Self-attested list of students placed	<u>View File</u>
Upload any additional information	<u>View File</u>
Details of student placement during the year (Data Template)	<u>View File</u>

5.2.2 - Number of students progressing to higher education during the year

5.2.2.1 - Number of outgoing student progression to higher education

20

File Description	Documents
Upload supporting data for student/alumni	<u>View File</u>
Any additional information	<u>View File</u>
Details of student progression to higher education	<u>View File</u>

5.2.3 - Number of students qualifying in state/national/international level examinations during the year (eg: JAM/CLAT/GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/State government examinations)

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5.2.3.1 - Number of students qualifying in state/ national/ international level examinations (eg: JAM/CLAT/NET/ SLET/ GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/ State government examinations) during the year

10

File Description	Documents
Upload supporting data for the same	<u>View File</u>
Any additional information	<u>View File</u>
Number of students qualifying in state/ national/ international level examinations during the year (Data Template)	<u>View File</u>

5.3 - Student Participation and Activities

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

8

File Description	Documents
e-copies of award letters and certificates	<u>View File</u>
Any additional information	<u>View File</u>
Number of awards/medals for outstanding performance in sports/cultural activities at unive rsity/state/national/international level (During the year) (Data Template)	<u>View File</u>

5.3.2 - Institution facilitates students' representation and engagement in various administrative, cocurricular and extracurricular activities (student council/ students representation on various bodies as per established processes and norms)

Saranathan College of Engineering believes that improvement is possible only with the association of all the stakeholders of the Institute- the students, their parents, the faculty and the

management.

Students act as class committee meeting member, President, Vice President, Secretary, Joint Secretary and Treasurer for decisive role in the execution of the club activities. Yearly once Quality Improvement Cell (QIC) organizes a Multidisciplinary project expo for students. Entrepreneurship Development Cell (EDC) is to create an awareness and motivation among the students to explore the field of entrepreneurship. Extracurricular activities are available to the students in the form of Sports, cultural and Photography and many clubs like Youth Red Cross, National Social Service, Red Ribbon Club, and Women Empowerment cell, Fine arts Association, Health club and Eco club are also the part of student activities. Due to covid situation some of the programs functioned in online. Women Empowerment Cell of SCE, joined hands with ICT ACADEMY and DXC technologies in CSR Initiative- Women Empowerment program. 100 girl students from our college have joined and undergoing skill development training courses to improve their employability skills. The WEP is a 200 Hours program-100 Hours of self learning and 100 Hours of Instructor Lead Training.

File Description	Documents
Paste link for additional information	http://saranathan.ac.in/IQAC/AQAR2021.php
Upload any additional information	<u>View File</u>

- 5.3.3 Number of sports and cultural events/competitions in which students of the Institution participated during the year (organized by the institution/other institutions)
- **5.3.3.1 -** Number of sports and cultural events/competitions in which students of the Institution participated during the year

8

File Description	Documents
Report of the event	<u>View File</u>
Upload any additional information	<u>View File</u>
Number of sports and cultural events/competitions in which students of the Institution participated during the year (organized by the institution/other institutions (Data Template)	<u>View File</u>

5.4 - Alumni Engagement

5.4.1 - There is a registered Alumni Association that contributes significantly to the development of the institution through financial and/or other support services

Saranathan College of Engineering has an engaged alumni network which allows the college to benefit from the skills and experience of our graduates. Alumni of our college are invited during various occasions and organize an interaction session with students. During Alumni interaction, our alumni offer their support to our students in building a bridge between college life and career life.

Our alumni interaction also helps in various ways such as

- To encourage and guide the students of our college on selfemployment to become entrepreneurs.
- To promote the industry-institute interaction to bridge the gap between industry requirements and education offered and enhance students' employability.
- To provide job opportunities to fresh bachelors through references of alumni professionals.
- To polish the soft skills and enhance the same for a better and more career centric options.

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

5.4.2 - Alumni contribution during the year

(INR in Lakhs)

File Description	Documents
Upload any additional information	No File Uploaded

GOVERNANCE, LEADERSHIP AND MANAGEMENT

6.1 - Institutional Vision and Leadership

6.1.1 - The governance of the institution is reflective of and in tune with the vision and mission of the institution

Vision

Impart an inclusive engineering education that beyond being a facilitator for a career and rudimentary skills, equips the students to offer ethically & environmentally conscious solutions to societal issues.

Mission

Develop the Institution into a Model Self Financing College of Engineering and Technology. Deliver Professional Training to our students with state-of-the art Laboratories and convert them into Technocrats of international repute.

- 1. Create a nurturing, holistic environment of engineering education to facilitate every student realize their full potential.
- 2. Strive to make the students strong in basic concepts armed with appropriate skills to enhance one's ability to apply the knowledge and provide solutions to real time issues.
- 3. Maintain an ambience that facilitates the students to strengthen their ethical value systems.
- 4. Actively promote R&D and institute-industry interaction.

The vision statement of SCE is about imparting engineering education that includes fundamental knowledge along with ethical skills thus providing quality education. The mission statement defines and specifies how the institution plans to fulfill its Vision. During the process of delivering the vision it has set itself an additional benchmark of becoming a model self-financing institution without compromising on its core ethical values.

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File Description	Documents
Paste link for additional information	http://www.saranathan.ac.in/IQAC/AQAR2021/ C6_1_1_ii.pdf
Upload any additional information	<u>View File</u>

- 6.1.2 The effective leadership is visible in various institutional practices such as decentralization and participative management.
 - The institution practices decentralization and participatory management in keeping with its belief in collective leadership and democratic traditions. A particular reflection of this practice may be seen in the extensive delegation of authority to the Heads of the various Departments.
 - The Ways in which Heads of Departments participate in the Management Process:
 - The Head of the Department oversees the Teaching Plans of his/her departmental faculty members.
 - He/she can convene departmental meetings where the Programmes for the entire term are decided.
 - He/she organizes and conducts the Parent-Teacher and mentor mentee meetings in which the academic progress of the students is discussed with the students and/or communicated to their guardians.
 - He/she, in consultation with his/her department oversees the paper-setting, moderation, evaluation, and marks submission of all internal examinations of the department in the Sara portal, and determines the internal marks of the students.

These committee heads are encouraged to form their own teams and come up with plans to deliver the targets of the individual committees. Efforts are made to ensure that there is adequate rotation of such committee heads so that all faculty members get a taste of this team building exercise.

File Description	Documents
Paste link for additional information	http://www.saranathan.ac.in/IQAC/AQAR2021/ C6_1_2_ii.pdf
Upload any additional information	<u>View File</u>

6.2 - Strategy Development and Deployment

6.2.1 - The institutional Strategic/perspective plan is effectively deployed

Role of Training and Placement in the Institution

The Department of Training and Placement plays a crucial role in finding job opportunities for Graduates graduating from the college. This is done by keeping in touch with reputed firms and industrial establishments. The department operates round the year to facilitate contacts between companies and graduates. In order to bridge the gap between academics and company expectations and also to make the students industry ready, the department has strategized and deployed a training system.

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 with the values of - 'Sincerity', 'Hard Work' and 'Ethics'.

To attain the above stated goal, the following key plans of action have been framed:

- To establish a link between students, alumni and the employers' community.
- To impart knowledge related to placement including verbal, aptitude, and reasoning skills as part of the regular academics and periodically evaluate the learning curve through assessments.
- To organize Aptitude & Soft skills Training Programs to prepare students to face Campus Recruitment process.
- Implementation and outcomes are discussed in additional information.

File Description	Documents
Strategic Plan and deployment documents on the website	<u>View File</u>
Paste link for additional information	http://www.saranathan.ac.in/IQAC/AQAR2021/ C6_2_1_iii.pdf
Upload any additional information	<u>View File</u>

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

Saranathan College of Engineering was established by "VidyaSevaRatnam", "Guru Seva Mani" Auditor Sri. K. Santhanam in the year 1998. It was so named in respectful memory of his Guru Principal Saranathan, the Principal of National College, Tiruchirappalli, Tamil Nadu. Saranathan is a self-financing Engineering college approved by AICTE and affiliated to Anna University, Chennai.

As per AICTE Norms the Governing Council is functioning under the Secretary (as the Chairman) and Principal of the College for effective administration and control. The institution has policies, administrative setup, and appointment and service rules for proper functioning.

The organizational structure of Saranathan College of Engineering (SCE) including, Governing Council are described as follows.

The Governing Council comprises of 14 Members and is represented by Chairman / Secretary of the Institute. The Secretary accomplishes the academic and administrative activities of SCE and convenes the Governing Council meeting once in a year or as and when required. All important policy decisions are taken by the Chairman of Governing Council of SCE.

For the proper functioning of Institute, the hierarchy is maintained as per the organization chart and responsibilities carried out at all the levels.

File Description	Documents
Paste link for additional information	http://www.saranathan.ac.in/IQAC/AQAR2021/ C6_2_2_ii.pdf
Link to Organogram of the institution webpage	http://www.saranathan.ac.in/IQAC/AQAR2021/ C6_2_2_iii.pdf
Upload any additional information	<u>View File</u>

6.2.3 - Implementation of e-governance in areas of operation Administration Finance and Accounts Student Admission and

A. All of the above

Support Examination

File Description	Documents
ERP (Enterprise Resource Planning)Document	<u>View File</u>
Screen shots of user inter faces	<u>View File</u>
Any additional information	<u>View File</u>
Details of implementation of e- governance in areas of operation, Administration etc(Data Template)	<u>View File</u>

6.3 - Faculty Empowerment Strategies

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

Institute has various welfare measures to encourage and empower the faculty members. The effective measures support them to meet their academic and personal goals.

The following are the welfare measures taken by the institute,

- Subsidized transport facilities to and from home to college and car facilities for senior staff members.
- Family Get-togethers
- Motivational Talk on Teachers' Day.
- A birthday gift voucher is given to all faculty members on their birth date.
- Financial assistance for FDP and workshop.
- On-duty for attending workshop, FDP, Conferences.
- Institution provides free lunch services to minimum of twenty members in the institute.
- Employment Provident Fund (EPF).
- Insurance scheme facility.
- Fee concession/scholarships for the children of faculty members.
- Maternity Leaves to female staff with salary.
- Facility of Wi-Fi in campus.
- Study leave to purse part time Ph.D.
- Ph.D. Increments to Teaching staff
- Reprographic facility (Xerox).
- Travel grand for official works.
- Marriage gifts.

File Description	Documents
Paste link for additional information	http://www.saranathan.ac.in/IQAC/AQAR2021/ C6 3 1 iv.pdf
Upload any additional information	<u>View File</u>

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

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

- 6.3.3 Number of professional development /administrative training programs organized by the institution for teaching and non-teaching staff during the year
- 6.3.3.1 Total number of professional development /administrative training Programmes organized by the institution for teaching and non teaching staff during the year

13

File Description	Documents
Reports of the Human Resource Development Centres (UGCASC or other relevant centres).	<u>View File</u>
Reports of Academic Staff College or similar centers	<u>View File</u>
Upload any additional information	<u>View File</u>
Details of professional development / administrative training Programmes organized by the University for teaching and non teaching staff (Data Template)	<u>View File</u>

6.3.4 - Number of teachers undergoing online/face-to-face Faculty development Programmes (FDP) during the year (Professional Development Programmes, Orientation / Induction Programmes, Refresher Course, Short Term Course etc.)

6.3.4.1 - Total number of teachers attending professional development Programmes viz., Orientation / Induction Programme, Refresher Course, Short Term Course during the year

107

File Description	Documents
IQAC report summary	<u>View File</u>
Reports of the Human Resource Development Centres (UGCASC or other relevant centers)	<u>View File</u>
Upload any additional information	<u>View File</u>
Details of teachers attending professional development programmes during the year (Data Template)	<u>View File</u>

6.3.5 - Institutions Performance Appraisal System for teaching and non-teaching staff

Performance Appraisal system consisting of various phases is done on a specific format annually and confidentially. The principal evaluate the submitted self-appraisal form. A self-appraisal form is formatted for Principal, HoDs, Professor, Associate Professor, Assistant Professor level.

Performance appraisal of non-teaching staff is done based on report from the Department.

Performance appraisal of teaching and non teaching staff is evaluated on the basis of following points,

- 1. Academic Execution.
- 2. Academic Innovation.
- 3. Publication/patent, Research, Consultancy and prominent Institute-Industry interactions.
- 4. Prominent external interaction/recognition including representing institution in university committees (BOS etc..).

Self-appraisal form duly filled in by the faculty is submitted to HoD. HoD will submit the format to the evaluation committee along with their comments on the concerned faculty. HOD has to submit their Self Appraisal form to Principal. Principal will review the forms by considering factors such as loyalty to institute, frequency of taking leave, special permissions, and mentoring ability.

After evaluation the fitness of the concerned faculty to continue in the present position or fitness for promotion is determined and documented. If any undesirable performance is noticed, the same is reported to the concerned faculty along with suggestions for necessary improvements.

File Description	Documents
Paste link for additional information	http://www.saranathan.ac.in/IQAC/AQAR2021/ C6_3_5_ii.pdf
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 Enumerate the various internal and external financial audits carried out during the year with the mechanism for settling audit objections within a maximum of 200 words

Every academic year, Head of the Institution convenes a meeting of the Heads of the Department, Training and Placement Head and Central Librarian Head to discuss the budget requirements on Recurring and Non-recurring expenses, Student development, Faculty development, Research and Development, Operation and Maintenance, Infrastructure development, Furniture, Training and Travel expenses. These expenses are projected based on intake of the students and future development plans of the Institution. The prepared budget is scrutinized by the Head of the Institution and submitted to the Governing Council for approval. The budget is approved by the Governing Council after having discussion with the Head of the Institution.

After the budget approval, the Head of the Institution convenes a meeting to discuss the action plan for procurement of the budgeted requirements. Actions for procurement of lab equipment, upgradation of existing lab facilities, purchase of consumables etc., are initiated by the respective departments based on the allotted budget. The allocated funds are utilized effectively to meet the expenses such as staff salary, infrastructure development, purchase of equipment, etc. The management monitors the utilization of financial resources by regular and periodical reviews. The accounts of the college are audited externally by chartered accountant regularly.

File Description	Documents
Paste link for additional information	http://www.saranathan.ac.in/IQAC/AQAR2021/ C6 4 1 i.pdf
Upload any additional information	<u>View File</u>

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

6.4.2.1 - Total Grants received from non-government bodies, individuals, Philanthropers during the year (INR in Lakhs)

nil

File Description	Documents
Annual statements of accounts	No File Uploaded
Any additional information	No File Uploaded
Details of Funds / Grants received from of the non- government bodies, individuals, Philanthropers during the year (Data Template)	No File Uploaded

6.4.3 - Institutional strategies for mobilization of funds and the optimal utilization of resources

Mobilisation of funds

The institution has a proper channel to generate funds for the smooth running of the institute in a sustainable way. This finance generated supports the Institution to meet its vision and mission.

Optimal Utilization of resources

Our institute has well defined financial monitoring system to monitor the optimal utilization of funds in a centralized manner. Institute follows a centralized management system for effective utilization of resources. Resource utilization for Infrastructure development, teaching and learning process, and other supplementary is done through proper centralized channel for optimal utilization. Resource available in institute premises is shared by all the departments such as seminar halls, computer labs, laboratories and supplementary components based on availability.

Mobilized funds are optimally utilized for various expenses comes under recurring and non-recurring expenses, salary for teaching, non teaching staff members and other expenses which includes Student development, Faculty development, Research and Development, Operation and Maintenance, Infrastructure development, Furniture, Training and Travel expenses, purchase of books for central and department library, transport, day-to-day administration, hostel and maintenance expenses etc.,

The students can utilize the budgeted amount in their development of co-curricular and extracurricular activities.

File Description	Documents
Paste link for additional information	http://www.saranathan.ac.in/IQAC/AQAR2021/ C6_4_1_i.pdf
Upload any additional information	<u>View File</u>

6.5 - Internal Quality Assurance System

6.5.1 - Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing the quality assurance strategies and processes

The primary objective of IQAC is to develop a system for consistent improvement in the performance of institution and thus achieve academic excellence. The quality assurance strategies and processes practiced in our institution are described below.

NPTEL Resource

NPTEL video resources available in the form of Hard Disc and the contents are also available in our institution intranet. More than 183 video courses available in various Engineering and Science disciplines. This facility has been available in our campus since February 2013. From February 2013 onwards our faculty members and students have registered for many of these NPTEL courses and taken those exams. Many have been certified in those NPTEL courses with good scores.

Spoken Tutorial

The institution is registered with IIT, Bombay Spoken tutorial team, and several departments have conducted various phases of training in Spoken tutorial. The process is continued effectively. From spoken tutorial website 20 open source software and 20 related tutorials are downloaded and stored in DVDs. Tutorials in Tamil version are available for some of the software. All the 15 video Tutorials have been downloaded and all such downloaded Tutorials are accessible in our Digital library.

File Description	Documents
Paste link for additional information	http://www.saranathan.ac.in/IQAC/AQAR2021/ C6_5_1_ii.pdf
Upload any additional information	<u>View File</u>

6.5.2 - The institution reviews its teaching learning process, structures & methodologies of operations and learning outcomes at periodic intervals through IQAC set up as per norms and recorded the incremental improvement in various activities

Two examples of institutional reviews and implementation of teaching learning reforms initiated by IQAC are on Outcome-Based Education and Academic auditing.

1. Outcome-Based Education is a student-centric teaching and learning methodology in which the course delivery, assessment are planned to achieve objectives and outcomes. It focuses on measuring student performance i.e. outcomes at different levels based on Blooms Taxonomy (BT).

BT was created to provide the classic definition of the levels of educational activity, from the very simple like memorizing facts to the more complex such as analyzing or evaluating information. Training in Blooms Taxonomy is done to upgrade the teaching skills and formulation of question papers. In addition, six departments of our institution has accredited by NBA for 3 years from 2018-2021.

- 2. Academic auditing is carried out in various levels to enhance the quality of teaching and learning process.
 - Academic planner for every semester is prepared as per Anna university norms.
 - Course materials, lab manuals, assessment test question papers are prepared and the mode of delivery of lectures by faculty members before the commencement of semester and checked by academic committee.

Faculty members incorporate changes suggested by the academic committee to ensure quality deliverables.

File Description	Documents
Paste link for additional information	http://saranathan.ac.in/IQAC/AQAR2021/C6_5 _2_ii.pdf
Upload any additional information	<u>View File</u>

6.5.3 - Quality assurance initiatives of the institution include: Regular meeting of Internal Quality Assurance Cell (IQAC); Feedback collected, analyzed and used for improvements Collaborative quality initiatives with other institution(s) Participation in NIRF any other quality audit recognized by state, national or international agencies (ISO Certification, NBA)

A. All of the above

File Description	Documents
Paste web link of Annual reports of Institution	http://www.saranathan.ac.in/IQAC/AQAR2021/ C6_5_3.pdf
Upload e-copies of the accreditations and certifications	<u>View File</u>
Upload any additional information	<u>View File</u>
Upload details of Quality assurance initiatives of the institution (Data Template)	<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

Women Empowerment Cell of Saranathan College of Engineering (SCE), Trichy was inaugurated on 26.11.2013 by Dr.Gayathri
Mathroobootham, M.B.B,S., Gynaecologist. Various programmes are conducted in our college through WEC. SCE organized a voluntary pap smear test as a token of respect for women on account of women's day celebration to raise awareness about cervical cancer among female staff members. Female staff members above 35 years of age undergone pap smear test for free of cost on March 06, 2021. The screening test was carried out in Shyamala Nursing Home, and

Lalitha Nursing Home, Trichy.WEC of SCE also joined in hands with ICT ACADEMY and DXC technologies in CSR Initiative- Women Empowerment program. 100 girl students from our college have joined and undergoing skill development training courses to improve their employability skills. The WEP is a 200 Hours program-100 Hours of self learning and 100 Hours of Instructor Lead Training.SCE has formed a Committee for Prevention of Sexual Harassment (POSH) under the recommendation of the Anna University, Chennai. All-Hour all round security service provided both at college and in the hostel to ensure safety of girl students. Minicomputer center with 10 Mbps Wi-Fi connectivity is available for girls at hostel.

File Description	Documents
Annual gender sensitization action plan	https://www.saranathan.ac.in/IQAC/AQAR2021 /C7_1_1_ii.pdf
Specific facilities provided for women in terms of:a. Safety and security b. Counseling c. Common Rooms d. Day care center for young children e. Any other relevant information	https://www.saranathan.ac.in/IOAC/AOAR2021 /C7 1 1 i.pdf

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

A. 4 or All of the above

File Description	Documents
Geo tagged 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 200 words) Solid waste management Liquid waste management Biomedical waste management E-waste management Waste recycling system Hazardous chemicals and radioactive waste management
 - Solid garbage is collected at our institution by arranging separate dust bins for biodegradable and non-biodegradable waste at distinct locations.
 - The Tiruchirappalli City Corporation receives the segregated

trash.

- For manure preparation, we use garden cuttings from our campus garden as well as cow dung from our cattle.
- They're dumped in the compost pile, and the manure is used to fertilise our campus's trees.
- At our institution, we use paperless communication.

Waste water from our women's dormitory is used for fodder cropping, and the resulting sludge is used as fodder manure. Our college canteen's waste water is collected separately and used to water trees on campus.

Sprinklers have been erected in our college garden to ensure that water is used in a controlled manner.

Sanitary napkins from the ladies restroom are disposed by incinerating in the Sanitary Napkin Incinerator.

ChemicalBottlesfor disposal which is handled by the Facility Management Division.

- In addition to hardware recycling solutions for e-waste management, we encourage our students to "Live in the Cloud."
- At our campus, the most common forms of e-waste are old computer monitors, printer cartridges etc.
- We regularly advise students on how to properly handle ewaste in order to reduce waste generation.

File Description	Documents
Relevant documents like agreements / MoUs with Government and other approved agencies	<u>View File</u>
Geo tagged photographs of the facilities	<u>View File</u>

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
Geo tagged photographs / videos of the facilities	<u>View File</u>
Any other relevant information	<u>View File</u>

7.1.5 - Green campus initiatives include

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

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

File Description	Documents
Geo tagged 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 are regularly undertaken by the institution

7.1.6.1 - The institutional environment and energy initiatives 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

C. Any 2 of the above

File Description	Documents
Reports on environment and energy audits submitted by the auditing agency	<u>View File</u>
Certification by the auditing agency	<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 disabled-friendly, barrier free environment Built environment with ramps/lifts for easy access to classrooms. Disabled-friendly washrooms Signage including tactile path, lights, display boards and signposts Assistive technology and facilities for persons with disabilities (Divyangjan) accessible website, screen-reading software, mechanized equipment 5. Provision for enquiry and information: Human assistance, reader, scribe, soft copies of reading material, screen reading

A. Any 4 or all of the above

File Description	Documents
Geo tagged photographs / videos of the facilities	<u>View File</u>
Policy documents and information brochures on the support to be provided	<u>View File</u>
Details of the Software procured for providing the 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 socioeconomic and other diversities (within 200 words).

Saranathan celebrates Navarathri festival every year to seek the blessings from goddess Durga. To commemorate the birthday of our Founder Secretary Vidya Seva Ratnam, Guru Seva Mani, Auditor K. Santhanam, Saranathan Women Empowerment Cell organizes free PapSmears check-up to our ladies faculty at free of cost to create

awareness to prevent progression to cervical cancer, Under the stewardship of Dr. N. Gayathri (M.D., D.N.B.) from Trichy. In connection with Independence day celebration, NSS unit of Saranathan conducts a Mass tree plantation programme in the college premises. Staff and students of NSS unit of the college participate in the tree plantation activity and plant the trees. 'Mantraanaam Oushadham Yajusham' is one of the Vedas that deals with sounds that can heal. Chanting Yajur Vedic mantras can help alleviate mental illnesses such as depression and enhance confidence, resulting in mental tranquilly.

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

7.1.9 - Sensitization of students and employees of the Institution to the constitutional obligations: values, rights, duties and responsibilities of citizens

The institution's different activities for instilling principles for being responsible citizens as stated in the Indian Constitution. Anna University, Chennai, has awarded Saranathan College of Engineering's NSS Unit the Best Unit Award for their commendable various contributions.

As part of a Corporate Social Responsibility "Interview Skills" Motivational session was held on 24th Sep 20 and "Distribution of face mask" to adopted Nagamangalam village People on 27th Sep 20.

Dr. G. Anitha, Dean of K.A.P. Viswanatham Medical College, and Dr. S.Dhanapaul, Head and Professor of K.A.P. Viswanatham Medical College, presented an awareness workshop on the Covid-19 Virus, in which the participants were sensitised on safety measures to battle Covid-19. At free cost, Free Vaccination camp was organised in M/s Lalitha Nursing home, Trichy. International Yoga day, NSS Day Celebration and Fit India movement day was celebrated on different date during this pandemic from home.

File Description	Documents
Details of activities that inculcate values; necessary to render students in to responsible citizens	https://www.saranathan.ac.in/IQAC/AQAR2021 /C7_1_8_i.pdf
Any other relevant information	https://www.saranathan.ac.in/IQAC/AQAR2021 /C7 1 8 ii.pdf

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 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 teachers, administrators students, 4. Annual awareness and other staff programmes on 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 programs 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

Our institution commemorates Days of National Importance such as Independence Day, Republic Day, and the death and birth anniversaries of famous figures in order to build a better India. Our institution commemorates these days of national significance to remember historical events or our leaders' contributions to the nation's development. On these occasions, we hold guest lectures, competitions, project presentations, and quiz competitions in order to mould our students into the top engineers in the country.

The fundamental goal of these activities is to instill in the brains of young engineers the ideas of great Indian characters. National Science Day is celebrated on each year to mark the discovery of the Raman's Effect by Indian Physicist Sir C. V. Raman. Different events is organized at Inter school level to explore the talents of kids .National Mathematics Day is celebrated on every year to mark the birth anniversary of legendary Indian mathematician, Srinivasa Ramanujan and his contributions to the field of mathematics. On this occasion our institution organizes guest lecturers to explore the application of mathematics in various fields.

File Description	Documents
Annual report of the celebrations and commemorative events for the last (During the year)	<u>View File</u>
Geo tagged 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 - Describe two best practices successfully implemented by the Institution as per NAAC format provided in the Manual.

BEST PRACTICES - I Research Initiatives

- 1. Title of the Practice: Inculcate a Research Culture among Faculty and Students.
- 2. Objectives of the Practice To provide an exposure to the world of research works in various engineering disciplines to the faculty and students to pursue research works in their fields of interest. To motivate the budding engineers to forecast the present and future problems and provide optimal solutions in various domains of engineering and technology and to stay update with the recent advancements. To bridge the industry-institute gap. To enhance the ability of the faculty members and students to publish their research articles in the refereed journals and international conferences. Make students aware of the various available research avenues •
- 3. The Context Since there is always a demand for the optimal and user-friendly solutions for problems in the real world, it becomes

necessary to create a culture of research in all. For successful existence of such research culture, along with strengthening the core concepts and working principles of conventional systems, an ambience must be created in which optimal and innovative solutions can be delivered. The present real-world problems demands socially relevant solutions. This automatically creates the need for research to be multi-disciplinary in nature. In these days of high obsolescence in technology an ability to "think out of the box" becomes an essential skill to solutions that are socially relevant. There is a need for the institution to train the students to meet such exacting expectations.

4. Practice The management of SCE motivates all the faculty members to pursue research in their areas of specializations and publish their research articles in the refereed journals and conferences. • As an additional facility to motivate faculty members, UG and PG students access provision is given to the research articles appearing in the leading publications such as IEEE and ASME through the digital library. The research scholars both part time and full time, are recognized by the management with cash awards depending on the milestones achieved. • The concept of "in- house final year projects" creates a possibility for the students to work in campus as well as to explore experiential learning. • The internal competitions and Project exhibitions conducted under the banner of Science Day and Engineers Day provide platforms for the students to start their research-oriented thinking in low level. This modest beginning helps the students to participate aggressively in larger hackathons and research competitions such as Smart India Hackathon, Solar/non fossil fuel vehicle development projects etc. Today's problems are multi-pronged. Therefore, they need a multidisciplinary approach to finding solution(s). To bring objectivity, multi-disciplinary projects are evaluated by technical experts from leading industries in that line or allied line of business. The inputs and feedback received from such experts go a long way in our students coming up industry acceptable solutions. • ECE, EEE & Mechanical Engineering departments could obtain "Anna University Recognized Research Centre" status based on the Facilities available in their respective PG research labs. Through these research centres, registration of academic research works, Doctoral committee meetings, Comprehensive Viva - voce and Thesis Submission are being carried out. These research centres have also paved the way for Memorandum of Understandings with the Leading industries, Centres of Excellence to promote industry-institute partnership and to offer courses through value added laboratories such as NI

Labview, eYantra. • All these have resulted in our student teams ably mentored by the faculty win laurels and recognitions in various competitions that are research based with the innovations in design and working prototype model. Majority of these prizes are cash awards. The institution incentivizes such efforts by offering a cash award which is equal to that of the cash prize won by the team.

- 5. Evidence of Success The number of research publications in the indexed journals by the faculty members and students. Research scholars have been awarded with the PhD Degrees through the AU recognized research centres by different departments. Scholars are pursing research works in part time and full time mode under the supervision of our faculty members recognized as research guides by the affiliating university. These are the irrefutable evidence for the fact that the institutions efforts at creating grass-root research thinking are bearing fruit.
- 6. Problems Encountered and Resources Required Being affiliated to a university, students from our institution are mandatorily expected to follow the traditional instructional method of learning and the common exam centric approach. This necessitates operating every semester under a stretched academic schedule. Thus it becomes necessary that value added courses on the emerging trends and tools can be conducted only after college hours or during semester holidays. But the technological advancements and the prototypes require the exposure and detailed knowledge of modern tools along with the abstract theoretical knowledge. Hence a balancing act has to be performed between providing hands-on experience on the usage of modern tools and the regular academic schedule. Funding research proposals, funding proposals for modernization of Labs, meeting the ever-increasing demand for research facilities with necessary software and hardware are the challenges to be met with the help of government funding agencies such as CSIR, DST and TNSCST.

BEST PRACTICES - II ERP Implementation 1. Title of the Practice Implementation of Sara Portal (ERP)

2. Goal/Objective of the Practice An integrated platform is required for maintaining academic records of the students, academic activities of the departments and for accessing them conveniently. Our college motivated the faculty members and students to develop such platform. SCE has developed an Institution ERP for timely availability of data which can be accessed through Intranet. The Sara Portal has been implemented

for the past ten years and is very user friendly. This has been very helpful in improving the performance of the institution.

- 3. The Context Saranathan always utilizes In-house resources and talents for developing software, designing advertisement materials and information brochures. Sara Portal has been developed for effective and End-to-End Campus Management. The aim is to inculcate management practices among these students as well as optimum utilization of the available resources. Most of the college related advertisements, posters and banners are designed by creative students under the guidance of faculty members.
- 4. The Practice: The staff of SCE has created an Intranet portal called "Sara Portal" which maintains most of the administrative and academic details. This is to provide them hands-on practice as well as improve the administrative involvement in SCE's daily academic works. The Sara Portal is hosted in datacentre for easy access from anywhere with role based access. The main features of this Portal are: ? Access to information regarding status of each and every student to all academic stakeholders including Director, Principal, Deans, HoDs, Faculty and Students. ? Sarastaff module: Every semester, the faculty members can map COs and POs for their subjects. • The availability of academic records like attendance, internal assessment test marks, subject wise failure list of the students help the faculty to provide proper guidance and counselling. • The status of missing attendance entry, mark entry at the department level allows the HODs to undertake necessary follow up actions. • Sara Portal has many features like Continuous assessment mark calculation, Internal Assessment Test Performance analysis, Attainment calculation, etc. • The Curriculum and Syllabus of current regulations of Anna University and NPTEL study materials are available for all branches. • The strength and name list of every class, feedback given by the students, details of library books borrowed, details of bus facility availed by students & staff are provided in the Portal. • Faculty members can update their profiles at any time about conferences, seminars, and publications in journals and conferences, which will appear in the faculty database. ? Sarahome module for students • The students can access their academic details like attendance, Internal assessment test marks, University grades, their ranking in the class. • The students provide feedback about the staff members handling the subjects for the semester twice during every semester. • Course exit survey is given by the students for the subjects based on the course outcomes at the end of every semester. ? The students of our college are encouraged to design information brochure,

advertisements, posters, leaflets, promotional material, etc.?

Most of the staff communications are (i) through mail which was created in Gmail under the domain name of saranathan and (ii) whatsapp group.? The staff members of our college are instrumental in the design, development and maintenance of our College Web Site .Online payment facilities for paying Tuition fees, University Exam fees, hostel fees, etc. are provided through the website.

- 5. Evidence of Success: ? Management is able to get the data on all activities of the college on time which helps in decision making process. ? As the data is available always, enormous amount of time and effort is saved in reworking. At same time, data can be reused for any type of report generation. The faculty members are able to spend time for Research and other development activities. ? Faculty members are able to acquire time to concentrate on slow learners. ? The cost of procuring materials is reduced in bringing the system across the Institution. ? Students and parents feel comfortable in accessing the information. ? The staff members can easy project the performance of the students to parents during Parent Teachers Meet. ? Additionally, the students have developed the following software module which is hosted our website: o Seminar Hall Booking o Content Creation / Video Creation ? Online payment helps to monitor and keep track of payments in a better way.
- 6. Problems Encountered and Resources Required: SCE has not encountered major problems in implementing the Intranet based Sara Portal. Problems Encountered: Certain advanced software require sophisticated technical configuration for the implementation of the institution Website. Non availability of the system due to network issues at times. Resources Required: Knowledge on how to frequently upgrade the existing system, in order to keep abreast with the latest technologies.

File Description	Documents
Best practices in the Institutional website	https://www.saranathan.ac.in/IQAC/AQAR2021 /C7 2 1.pdf
Any other relevant information	https://www.saranathan.ac.in/IQAC/AQAR2021 /C7_2_1_ii.pdf

7.3 - Institutional Distinctiveness

7.3.1 - Portray the performance of the Institution in one area distinctive to its priority and thrust within 200 words

SARANATHAN COLLEGE OF ENGINEERING provides the best amenities required for students to enhance their Technical and Managerial skills, Academic activities thro' Online mode. The academic processes are providing certification courses to the students in enhancing their knowledge beyond academics. Staff is encouraged to develop their own projects that are funded by AICTE, DST and Government of India and received around 16 lakhs .Staff and Students are also focused on reputed journal and conference publications in this pandemic. The Placement cell has adopted an effective communication system to keep the students informed about potential job opportunities.

SCE encouraged and motivated the students to take online training by providing cash awards. Entrepreneurship is another major focus at Saranathan College of Engineering. The academic year 2020-21 experienced a severe pandemic during which the class room teaching was totally suspended and academic activity was disrupted. Google Suite came to our rescue with a slew of new features exclusively for teachers and students to ensure online teaching. Google Meet is seamlessly integrated with Google Classroom which enables us to administer online assignments to students, conduct periodical tests and organize quizzes for them. The online proceedings were recorded for monitoring and future reference.

Part B

CURRICULAR ASPECTS

1.1 - Curricular Planning and Implementation

- 1.1.1 The Institution ensures effective curriculum delivery through a well planned and documented process
 - The college being affiliated to Anna University, Chennai, strictly adheres to the curriculum, regulations and follows the syllabus of each course in each Programme, semester academic planner are framed by the Institution.
 - The allocation of each course to the faculty members is based on their willingness and finalized by HoD on the basis of faculty's technical skill, competency level, experience, students' feedback and academic performance.
 - At the beginning of every Semester, Course Committee Meeting is organized, and the Course handlers plan their lesson plan/lecture & practical schedule with Course Outcomes, Assignments, content beyond syllabus.
 - Bridge course is planned for the first year students to educate them about the environment and culture of the institution.
 - Course delivery is carried out online and offline as per the lesson plan/lecture schedule and it is recorded in the course log book.
 - The Academic performance of the Students is measured and monitored through Online Centralized Internal Assessment Tests and Class Committee Meetings are conducted to encourage the students to improve their academic performance and other skills.
 - Course Outcome Survey, Students' feedback is obtained from all the students for all the courses at the end of the semester.

File Description	Documents
Upload relevant supporting document	<u>View File</u>
Link for Additional information	https://saranathan.ac.in/IQAC/AQAR2021/C1 _1_1.pdf

1.1.2 - The institution adheres to the academic calendar including for the conduct of Continuous Internal Evaluation (CIE)

- Academic planner is prepared by a team of senior Faculty members in consultation with Principal, Dean (S&H), Dean (R&D) and HoDs.
- Followed by, the department academic planner is framed by incorporating co-curricular activities, faculty meeting with HOD, Mentor-Mentee Meeting, Class Committee Meeting, Internal Assessment Test series and Question paper, review of course file, course log book submission dates.
- Schedule for IAT tests is announced and displayed in advance by Principal.
- The College has an Exam Cell and it holds the responsibility for all exam related activities.
- The question papers are set to test various cognitive levels of the student as per Bloom's Taxonomy.
- A detailed scheme of evaluation is prepared for every course prior to start of evaluation of the answer scripts.
- The answer scripts are issued to the students to verify the scheme of evaluation with the marks awarded by the course handlers.
- Complete transparency is ensured while returning the answer books to the students; the marks are entered in the institution web portal to display the performance of students.
- The continuous evaluation process provides more opportunities to get feedback of the progress of the students.

File Description	Documents
Upload relevant supporting document	<u>View File</u>
Link for Additional information	https://saranathan.ac.in/IQAC/AQAR2021/C1 1_2.pdf

1.1.3 - Teachers of the Institution participate in following activities related to curriculum development and assessment of the affiliating University and/are represented on the following academic bodies during the year. Academic council/BoS of Affiliating University Setting of question papers for UG/PG programs Design and Development of

B. Any 3 of the above

Curriculum for Add on/ certificate/ Diploma Courses Assessment /evaluation process of the affiliating University

File Description	Documents
Details of participation of teachers in various bodies/activities provided as a response to the metric	<u>View File</u>
Any additional information	<u>View File</u>

1.2 - Academic Flexibility

1.2.1 - Number of Programmes in which Choice Based Credit System (CBCS)/ elective course system has been implemented

1.2.1.1 - Number of Programmes in which CBCS/ Elective course system implemented

12

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

1.2.2 - Number of Add on /Certificate programs offered during the year

1.2.2.1 - How many Add on /Certificate programs are added during the year. Data requirement for year: (As per Data Template)

8

File Description	Documents
Any additional information	<u>View File</u>
Brochure or any other document relating to Add on /Certificate programs	<u>View File</u>
List of Add on /Certificate programs (Data Template)	<u>View File</u>

1.2.3 - Number of students enrolled in Certificate/ Add-on programs as against the total number of students during the year

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508

File Description	Documents
Any additional information	<u>View File</u>
Details of the students enrolled in Subjects related to certificate/Add-on programs	<u>View File</u>

1.3 - Curriculum Enrichment

- 1.3.1 Institution integrates crosscutting issues relevant to Professional Ethics, Gender, Human Values, Environment and Sustainability into the Curriculum
 - Equal opportunities are given to both the genders in terms of admissions, employment, co-curricular and extracurricular activities etc
 - The Institute has constituted various committees including Sexual Harassment Redressal committee, Women Empowerment Cell, Women Redressal Cell and grievance Redressal committee to promote gender equity and also deal with related issues of safety and security of girl students, ladies staff and faculties.
 - All programs have a compulsory course on Environmental Science and Engineering in First /Second year curriculum to study basic components of environment and its application to tackle issues such as pollution control, green gases etc.
 - Students opt as electives from Environment and sustainability, Disaster Management, Air Pollution and Control Engineering, Transport and Environment, Environmental and Social Impact Assessment.
 - Many Projects are undertaken by students relating to environmental and Sustainability issues like climate change, water pollution, sewage treatment, air pollution, rain water harvesting, runoff modeling, flood prediction, green concrete, materials, energy conservation etc.
 - In order to integrate the cross cutting issues relevant to human values and professional ethics, Anna University has included different types of courses in the curriculum and creates awareness on business ethics and human values among students.

File Description	Documents
Any additional information	<u>View File</u>
Upload the list and description of courses which address the Professional Ethics, Gender, Human Values, Environment and Sustainability into the Curriculum.	<u>View File</u>

1.3.2 - Number of courses that include experiential learning through project work/field work/internship during the year

393

File Description	Documents
Any additional information	<u>View File</u>
Programme / Curriculum/ Syllabus of the courses	<u>View File</u>
Minutes of the Boards of Studies/ Academic Council meetings with approvals for these courses	<u>View File</u>
MoU's with relevant organizations for these courses, if any	<u>View File</u>
Institutional Data in Prescribed Format	<u>View File</u>

1.3.3 - Number of students undertaking project work/field work/ internships

1191

File Description	Documents
Any additional information	<u>View File</u>
List of programmes and number of students undertaking project work/field work//internships (Data Template)	<u>View File</u>

1.4 - Feedback System

1.4.1 - Institution obtains feedback on the syllabus and its transaction at the

A. All of the above

institution from the following stakeholders Students Teachers Employers Alumni

File Description	Documents
URL for stakeholder feedback report	https://saranathan.ac.in/IOAC/AOAR2021/C1 _4_1.pdf
Action taken report of the Institution on feedback report as stated in the minutes of the Governing Council, Syndicate, Board of Management	<u>View File</u>
Any additional information	<u>View File</u>

1.4.2 - Feedback process of the Institution may be classified as follows

B. Feedback collected, analyzed and action has been taken

File Description	Documents
Upload any additional information	<u>View File</u>
URL for feedback report	https://saranathan.ac.in/IQAC/AQAR2021/C1 4 2.pdf

TEACHING-LEARNING AND EVALUATION

2.1 - Student Enrollment and Profile

2.1.1 - Enrolment Number Number of students admitted during the year

2.1.1.1 - Number of students admitted during the year

535

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 seats reserved for various categories (SC, ST, OBC, Divyangjan, etc. as per applicable reservation policy during the year (exclusive of supernumerary seats)

2.1.2.1 - Number of actual students admitted from the reserved categories during the year

459

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 the learning levels of the students and organizes special Programmes for advanced learners and slow learners

The learning levels of the students are assessed based on the performance of the students in the Internal Assessment tests and also based on their CGPA in the university examinations. The Students are categorized as advanced learners, Average and slow learners. Due to pandemic the classes were conducted through Google Class rooms (online mode) and the tests are also conducted through online platform.

Bridge Course / Induction program addresses the psychological impact of the change in learning methodology from school to college. Bridge courses are conducted for one week (online mode) for the first year newly admitted students on the topics of Foundation courses in the subjects such as English, Mathematics, Physics and Chemistry, Communication skills, Programming skills and Extra-curricular activities.

Soft skills training, software training programs on Lab view for CLAD were conducted along with the counseling and motivation by mentors to the mentees. Students were encouraged to participate British English, NPTEL certification courses. Students participated in the online Internship offered by companies. Since most of the classes are online classes, the slow learners identified before pandemic were provided with study materials such as questions and answers for scoring two marks.

File Description	Documents
Paste link for additional information	http://www.saranathan.ac.in/IQAC/AQAR2021 /C2 2 1.pdf
Upload any additional information	<u>View File</u>

2.2.2 - Student- Full time teacher ratio (Data for the latest completed academic year)

Number of Students	Number of Teachers
2486	149

File Description	Documents
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

Our Institute has deployed several practices for active participation of students in the Teaching-Learning Process. Suchstudent centric methods which yielded good results are listed below.

Experiential learning

- Guest Lectures and workshops by experts from industry and academia are arranged through online platforms for students to enhance their knowledge in various emerging topics.
- Skill Improvement Programmes followed by Certification such as CLAD, NPTEL Certification courses on Labview.
- Presenting papers in the conferences (online) by referring standard journals such as IEEE, Springer, Elsevier, etc.
- Opportunities to take up Internships such as company specific training in MRF, E-Con, Infosys, Vuram, Hack with Infy etc.,

Participative Learning

 Youtube Channels and Blogs have been created for uploading the study materials to provide 24/7 access to knowledge. Test questions are prepared by the students and circulated randomly through their forums.

Problem Solving Methodologies

 Participation in Hackathons, Virtual Engineering project Contests (conducted by private corporations as well as the Government under the title Smart India Hackathon),

- Design of Electrical Vehicle Competitions helps in enhancing the problem solving and Analytical skills of students.
- Aptitude and Programming Training, Internship opportunities empower the students to enhance their learnby-doing skills.

File Description	Documents
Upload any additional information	<u>View File</u>
Link for additional information	http://www.saranathan.ac.in/IQAC/AQAR2021
	<u>/C2 3 1.pdf</u>

2.3.2 - Teachers use ICT enabled tools for effective teaching-learning process. Write description in maximum of 200 words

- Information & Communications Technology (ICT) enabled teaching methodologies was a boon for the faculty members during pandemic period. Multimedia teaching aids such as iPads, writing / graphical Tablets with internet enabled computer/laptops are used by the faculty members for better illustration of concepts.
- Informative tools are the applications/ digital resources available on internet that provide information in multimedia formats. Communicative tools such as Google Class rooms, Official Whatsapp groups, Group mail IDs facilitate communication between the teacher and their students. ICTs arouse interest among students and encourage them to adopt à new way of acquiring in- depth knowledge and developing skills.
- The online course materials of NPTEL, materials provided through other online resources are made available in the Digital Library.
- At regular intervals, the faculty members effectively utilize Audio Visual aids to laboratory experiments to the students.
- Online access to the refereed journals, e- books and ejournals are made as part of Learning Management Systems (LMS) was provided to the students trough Faculty members.
- Online workshops and guest lectures on the recent technology -developments, online training programs by thedepartment ofT & P for effective teaching and learning

by the faculty members and students.

File Description	Documents
Upload any additional information	<u>View File</u>
Provide link for webpage describing the ICT enabled tools for effective teaching-learning process	<u>View File</u>

2.3.3 - Ratio of mentor to students for academic and other related issues (Data for the latest completed academic year)

2.3.3.1 - Number of mentors

115

File Description	Documents
Upload, number of students enrolled and full time teachers on roll	<u>View File</u>
Circulars pertaining to assigning mentors to mentees	View File
Mentor/mentee ratio	<u>View File</u>

2.4 - Teacher Profile and Quality

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

149

File Description	Documents
Full time teachers and sanctioned posts for year (Data Template)	<u>View File</u>
Any additional information	No File Uploaded
List of the faculty members authenticated by the Head of HEI	<u>View File</u>

- ${\bf 2.4.2 Number \ of \ full \ time \ teachers \ with \ Ph. \ D. \ / \ D.M. \ / \ M.Ch. \ / D.N.B \ Superspeciality \ / \ D.Sc. \ / \ D.Litt. \ during \ the \ year \ (consider \ only \ highest \ degree \ for \ count)}$
- 2.4.2.1 Number of full time teachers with Ph. D. / D.M. / M.Ch. /D.N.C Superspeciality / D.Sc. / D.Litt. during the year

54

File Description	Documents
Any additional information	<u>View File</u>
List of number of full time teachers with Ph. D. / D.M. / M.Ch./ D.N.B Super specialty / D.Sc. / D.Litt. and number of full time teachers for year (Data Template)	<u>View File</u>

2.4.3 - Number of years of teaching experience of full time teachers in the same institution (Data for the latest completed academic year)

2.4.3.1 - Total experience of full-time teachers

1322

File Description	Documents
Any additional information	<u>View File</u>
List of Teachers including their PAN, designation, dept. and experience details(Data Template)	<u>View File</u>

2.5 - Evaluation Process and Reforms

2.5.1 - Mechanism of internal assessment is transparent and robust in terms of frequency and mode. Write description within 200 words.

Theory Courses

- Three Internal Assessment Tests are conducted for every semester. The schedule is declared in the Academic Calendar shared with the students.
- Two question papers are set along with the course outcomes and as per appropriate levels based on Blooms Taxonomy where the best question paper is selected by the HoD.
- Due to Pandemic, the internal exams were conducted through online platforms with the video cameras were on.
- An Audit report is prepared by the QIC on the test papers evaluation.

Practical Courses

 Based on the student performance in the model exam conducted, the internal marks for the laboratory courses are entered in the web portal of Anna University.

Project Work

- The final year student's projects are selected in line with department mission, vision and Program outcomes.
- Students are provided of various fields for selecting the project ideas. Students are given choice to choose their guide based on the specialized area of faculty members.
- Students select a topic of his/her interest and then perform literature survey, formulate the problem formally and then implement it.
- Students are encouraged in the project reviews to publish their project work in reputed journals/conferences.

File Description	Documents
Any additional information	<u>View File</u>
Link for additional information	
	http://www.saranathan.ac.in/IQAC/AQAR2021
	<u>/C2 5 1.pdf</u>

2.5.2 - Mechanism to deal with internal examination related grievances is transparent, timebound and efficient

As per Anna University (AU) requirements, a profile must be created for every student to maintain the database in AU-Web portal for further process. The grievances related to profile correction/change will be made as when required. Exam Cell steps in and help resolve issues related to name, date of birth correction in Grade sheets and other documents. Any grievances, related to applying for photocopy of the valued answer script, "revaluation" and "review revaluation", is addressed by Exam Cell as and when required. The database maintained as per AU requirements is considered as the only relevant reference for evaluating whether a student meets the eligibility criteria set down by any external agency (like eligibility to participate in placement drives conducted by various companies)

Three Internal Assessments Test marks from all the departments are entered in the AU-Web portal as per entry period given by AU. Grievances related to AU-Web portal in displaying the marks scored by the students are addressed immediately.

File Description	Documents
Any additional information	<u>View File</u>
Link for additional information	
	http://www.saranathan.ac.in/IQAC/AQAR2021
	<u>/C2_5_2.pdf</u>

2.6 - Student Performance and Learning Outcomes

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

A successful outcome-based curriculum involves aligning the individual Course Outcome (CO) with the intended Program Outcomes (POs) and with Program Specific Outcomes (PSOs). The CO-PO mapping paves the way to examining the extent to which the outcomes are assessed in the curriculum. The department has defined its own PEOs and PSOs in alignment with Program Outcomes described by University curriculum and feedback from Industry experts.

Five or six Course outcomes of each course are formed by the department faculty mapping them with PSO and PO. PO, PSO & COs are displayed in the website and that too department wise. In the Course committee meeting conducted with the subject experts and Head of the department, the faculty members will put forth the course outcomes for their subjects and fine tune them before the beginning of each semester.

The COs are included in the logbooks and the intranet portal of the institution along with mapping s. COs are disseminated to the students on the introductory classes of each course. Also COs are recalled by the faculty members during classes before the beginning of each unit in the subject. Course Outcomes are specified in test question papers, Assignments and Tutorial Problem worksheets.

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for Additional information	http://saranathan.ac.in/IQAC/AQAR2021/C2_ 6_1.pdf
Upload COs for all Programmes (exemplars from Glossary)	<u>View File</u>

2.6.2 - Attainment of Programme outcomes and course outcomes are evaluated by the institution.

The direct attainment of each CO is calculated based on the ratio of 60 % from external examinations (by taking the percentage of students who have scored above the set target) and 40% through internal examinations. The indirect attainment is obtained from student's survey depending on the percentage of attainment.

A correlation matrix of COs of each course with POs and PSOs is created. The direct attainment of each POs and PSOs from internal and university examinations and average of all POs and PSOs are calculated using the matrix. The expected PO attainment level is fixed as 3, 2 or 1.

A graduate exit survey and an alumni survey on each PO are collected. From 80 % of the attainment through direct assessment and 20% Attainment through indirect assessment, the overall attainment is determined.

This procedure is followed for all academic years. If the set target of COs is not achieved, then the process is repeated. If it is achieved, then it is revised to a higher value. If the target set for POs and PSOs attainment is achieved then the target is revised to a higher value and repeated, else, corrective measures are implemented.

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for Additional information	http://saranathan.ac.in/IOAC/AOAR2021/C2 6 2.pdf

2.6.3 - Pass percentage of Students during the year

2.6.3.1 - Total number of final year students who passed the university examination during the year

729

File Description	Documents
Upload list of Programmes and number of students passed and appeared in the final year examination (Data Template)	<u>View File</u>
Upload any additional information	<u>View File</u>
Paste link for the annual report	https://saranathan.ac.in/IQAC/AQAR2021/C2 _6 3 b1.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://saranathan.ac.in/IOAC/AOAR2021/C2 7 1.pdf

RESEARCH, INNOVATIONS AND EXTENSION

3.1 - Resource Mobilization for Research

3.1.1 - Grants received from Government and non-governmental agencies for research projects / endowments in the institution during the year (INR in Lakhs)

3.1.1.1 - Total Grants from Government and non-governmental agencies for research projects / endowments in the institution during the year (INR in Lakhs)

16.60743

File Description	Documents
Any additional information	<u>View File</u>
e-copies of the grant award letters for sponsored research projects /endowments	<u>View File</u>
List of endowments / projects with details of grants(Data Template)	<u>View File</u>

3.1.2 - Number of teachers recognized as research guides (latest completed academic year)

3.1.2.1 - Number of teachers recognized as research guides

18

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

3.1.3 - Number of departments having Research projects funded by government and non government agencies during the year

3.1.3.1 - Number of departments having Research projects funded by government and non-government agencies during the year

2

File Description	Documents
List of research projects and funding details (Data Template)	<u>View File</u>
Any additional information	<u>View File</u>
Supporting document from Funding Agency	<u>View File</u>
Paste link to funding agency website	https://www.aicte-india.org/schemes/institutional-development-schemes

3.2 - Innovation Ecosystem

3.2.1 - Institution has created an ecosystem for innovations and has initiatives for creation and transfer of knowledge

The institution provided adequate ambience for students and faculty to explore areas of technological advancements with the pandemic period drastically transforming skill enhancement in a broader perspective. Technical webinars on data management sciences like Cloud Computing and Big data Analytics conducted by the DELL EMC Centre of Excellence provided an excellent platform for staff and students to get trained in this advanced technology. Microsoft Certification Programme (MCP), Microsoft Technical Associate Certification (MTA), INFOSYS CAMPUS CONNECT

etc. continue to produce qualified and industry -ready software professionals.

A range of CAD/CAM/CAE software like AUTODESK Inventor, SOLIDWORKS, CREO, EDGECAM and ANSYS, encourage project ventures in contemporary areas of design, modeling, and analysis. An STTPconducted on Rudiments and Practices in Computational Fluid Dynamics provided a platform to interact with subjectexperts from premier institutions and PSUsencouraging research in this area. AUTOMATION STUDIO and SIMCENTRE-AMESIM softwarefacilitate multi-disciplinary learning platforms. The Advanced Power System Research Laboratory hosted a FDP on Novel Design and Innovative practices in Switchgear technology, facilitating rich information exchange from across the countryon advanced practices.

The institution's Quality Improvement Cell (QIC) aims at improving learning ability of students through open access eresources and an upgraded digital library.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	http://saranathan.ac.in/IQAC/AQAR2021/C3_ 2_1.pdf

3.2.2 - Number of workshops/seminars conducted on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship during the year

3.2.2.1 - Total number of workshops/seminars conducted on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship year wise during the year

40

File Description	Documents
Report of the event	<u>View File</u>
Any additional information	<u>View File</u>
List of workshops/seminars during last 5 years (Data Template)	<u>View File</u>

3.3 - Research Publications and Awards

3.3.1 - Number of Ph.Ds registered per eligible teacher during the year

3.3.1.1 - How many Ph.Ds registered per eligible teacher within the year

64

File Description	Documents
URL to the research page on HEI website	<pre>https://www.saranathan.ac.in/center.php?t</pre>
List of PhD scholars and their details like name of the guide, title of thesis, year of award etc (Data Template)	View File
Any additional information	<u>View File</u>

3.3.2 - Number of research papers per teachers in the Journals notified on UGC website during the year

3.3.2.1 - Number of research papers in the Journals notified on UGC website during the year

114

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

3.3.3 - Number of books and chapters in edited volumes/books published and papers published in national/international conference proceedings per teacher during the year

3.3.3.1 - Total number of books and chapters in edited volumes/books published and papers in national/ international conference proceedings year wise during year

100

File Description	Documents
Any additional information	<u>View File</u>
List books and chapters edited volumes/ books published (Data Template)	<u>View File</u>

3.4 - Extension Activities

3.4.1 - Extension activities are carried out in the neighborhood community, sensitizing students to social issues, for their holistic development, and impact thereof during the year

The NATIONAL SERVICE SCHEME (NSS) unit of our college conducts Personality / Character Development Programmes as mandated by Anna University Regulations. Activities like Career Guidance Programs, Tree plantation, five day village adoption camp etc are conducted. The unit has been recognized as the best among affiliated colleges, by Anna University (Award received on 20/09/2020).

YOUTH RED CROSS (YRC) Unit of the institution is actively involved in campus cleaning, awareness programmes regarding dengue fever, rain water harvesting methods, campaign against plastic usage etc.

RED RIBBON CLUB (RRC) of the institution conducts blood donation camps, free health check-up camps, AIDS awareness and orientation programmes.

ECO CLUB of the institution actively involves staff and students in aggressive tree planting initiatives to transform the campus into a green shield.

WOMEN EMPOWERMENT CELL aims at empowering girl students and women faculty through various initiatives, like invited talks by leading career women from various walks of life, awareness on safety, health, career and self employment aspects.

The Institution is a centre for conducting competitive/ recruitment examinations like NEET, TNPSC and storage, as well as counting of Electronic voting machines (EVM's) for State Assembly and Parliament Elections.

File Description	Documents
Paste link for additional information	http://saranathan.ac.in/IQAC/AQAR2021/C3_ 4_1.pdf
Upload any additional information	<u>View File</u>

3.4.2 - Number of awards and recognitions received for extension activities from government / government recognized bodies during the year

3.4.2.1 - Total number of awards and recognition received for extension activities from Government/ Government recognized bodies year wise during the year

3

File Description	Documents
Any additional information	<u>View File</u>
Number of awards for extension activities in last 5 year (Data Template)	<u>View File</u>
e-copy of the award letters	<u>View File</u>

- 3.4.3 Number of extension and outreach programs conducted by the institution through NSS/NCC/Red cross/YRC etc., (including the programmes such as Swachh Bharat, AIDS awareness, Gender issues etc. and/or those organized in collaboration with industry, community and NGOs) during the year
- 3.4.3.1 Number of extension and outreach Programs conducted in collaboration with industry, community and Non- Government Organizations through NSS/ NCC/ Red Cross/ YRC etc., during the year

7

File Description	Documents
Reports of the event organized	<u>View File</u>
Any additional information	<u>View File</u>
Number of extension and outreach Programmes conducted with industry, community etc for the during the year (Data Template)	<u>View File</u>

- 3.4.4 Number of students participating in extension activities at 3.4.3. above during year
- 3.4.4.1 Total number of Students participating in extension activities conducted in collaboration with industry, community and Non- Government Organizations such as Swachh Bharat, AIDs awareness, Gender issue etc. year wise during year

174

File Description	Documents
Report of the event	<u>View File</u>
Any additional information	<u>View File</u>
Number of students participating in extension activities with Govt. or NGO etc (Data Template)	<u>View File</u>

3.5 - Collaboration

3.5.1 - Number of Collaborative activities for research, Faculty exchange, Student exchange/ internship during the year

3.5.1.1 - Number of Collaborative activities for research, Faculty exchange, Student exchange/ internship year wise during the year

32

File Description	Documents
e-copies of related Document	<u>View File</u>
Any additional information	<u>View File</u>
Details of Collaborative activities with institutions/industries for research, Faculty	<u>View File</u>

3.5.2 - Number of functional MoUs with institutions, other universities, industries, corporate houses etc. during the year

3.5.2.1 - Number of functional MoUs with Institutions of national, international importance, other universities, industries, corporate houses etc. year wise during the year

11

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

Saranathan College of Engineering established in the year 1998 is one among top 20 colleges in Tamil Nadu. The college is situated in a sprawling 20.43acre campus. SCE has a well established infrastructure with well equipped Classrooms and laboratories as per AICTE specifications. To prepare the students to industry expectations, the college has fully equipped industry tie-up laboratories like E-Yantra Robotics Lab, Infosys campus connect Lab, National Instruments Research Lab and Communication lab. The number and area of the class rooms and equipments in the Labs meet the AICTE norms. SWAYAM-NPTEL, MOOCS and internet resources help in self-learning to interested students. Each department has separate Seminar Halls with ICT enabled facilities. Special facilities have been provided for physically challenged students' such as ramps, lifts, wash room, relocation (if needed) of class rooms, wheel chairs, special attention and counseling where needed. More than 800 desktop computers are available in different departments and laboratories with 1000/100Mbps LAN connectivity to carry out academic and administrative work. The hostels have an area of 3,754sq.m for boys and 5,600sq.m. for girls with Wi-Fi, gymnasium, library, ambulance service etc. Well maintained transport facilities to day scholars. A City union bank ATM facility also provided insidecampus.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://saranathan.ac.in/IOAC/AOAR2021/C4 1_1.pdf

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

SCE encourages sports activities and gives importance to pursuing excellence in sports. The sports infrastructure comprises facilities for indoor and outdoor games. There are well maintained outdoor grounds for Cricket, Football, Tennis, Basket ball, Volley ball, Hockey, Athletics and gym for boys. A

separate sports area for field events like Shot put, Kho-Kho, etc., There are also dedicated spaces for Table Tennis, Weight/Power Lifting, Chess, and Carrom. The College also rewards with scholarships outstanding achievers in sports. Students are encouraged to participate in various Zonal, Inter Zonal, State, National and International Level Tournaments. Such participation is ensured by hosting such National Sports Events in the campus on grounds that meet the exacting requirements of such National Sports Associations. The Management is committed to providing these participants with all necessary facilities. Yoga sessions are arranged, for the students, by the Separate yoga trainers for boys and girls.

Cultural Events: Students possessing talent in cultural activities are encouraged to perform in various events and encourage taking part in extra-curricular activities. A cultural fest and a talent show in the names of "SAARAL" and "Margazhi Maha Utsav" are aimed at bringing out the talents of student community and showcasing our heritage arts.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://saranathan.ac.in/IQAC/AQAR2021/C4 _1_2.pdf

4.1.3 - Number of classrooms and seminar halls with ICT- enabled facilities such as smart class, LMS, etc.

17

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://saranathan.ac.in/IQAC/AQAR2021/C4 1_3.pdf
Upload Number of classrooms and seminar halls with ICT enabled facilities (Data Template)	<u>View File</u>

4.1.4 - Expenditure, excluding salary for infrastructure augmentation during the year

(INR in Lakhs)

4.1.4.1 - Expenditure for infrastructure augmentation, excluding salary during the year (INR in lakhs)

78.44

File Description	Documents
Upload any additional information	<u>View File</u>
Upload audited utilization statements	<u>View File</u>
Upload Details of budget allocation, excluding salary during the year (Data Template	<u>View File</u>

4.2 - Library as a Learning Resource

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

Library is fully automated and In-house software used for Circulation, Procurement, Reservation, OPAC (Online Public Access Catalog), Project Reports and Question papers. All the library documents are bar- coded and books are issued to users by reading the barcode of the document. In-house software is very versatile and is extensively used for generating all the reports that are required in day to day administration of the Library.

Library Networking [Intranet and Internet]

Since the Library is fully automated, the holdings of the Library could be searched using OPAC. The holdings include the books and Journals, syllabus, question papers and Project reports.

For the last 10 years the library is a member of the IEEE and ASME. The Library has internet facility through which the eresources can be accessed. On an average around 150 students per day make use of the Library resources. The users of the Library can access publications of all major publishers like Springer, ASME, IEEE, etc. The users can access around 5,000 ebooks and 241 International journals. The Central Library is also a member of National Digital Library (NDL) which has a collection of more than 6 lakh e-books which the students and staff are making use of it. The journals that are being

subscribed are bound as back volumes. There are about 101 titles and 3153 bound volumes. Library also maintains Project reports that are submitted by the students as part of their course curriculum are being used extensively by the student community. The Digital Library has 30 systems through which Students can access the available e-content.

Reprography and Scanners facility

A high-end Canon Xerox machine, that has the facilities like copying, scanning, and printing, is available in the library.

Library Classification and Cataloguing in Standard Classification format.

Library is making use of Dewey Decimal Classification (23rd edition) for all its documents. For cataloguing the library is making use of MARC II format.

Open Access of arrangement of Print and Non-book materials

Right from the inception of the Library, it is following the open access to all its documents housed in it that includes books: Bound volumes, reports and other reading material. The library has good bay guides which helps the readers to easily locate the books and other reading material even without the help of Library staff. The departmental books are arranged subject-wise and an index is pasted on each rack.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for Additional Information	https://saranathan.ac.in/IQAC/AQAR2021/C4 _2_1.pdf

4.2.2 - The institution has subscription for
the following e-resources e-journals e-
ShodhSindhu Shodhganga Membership e-
books Databases Remote access toe-
resources

A. Any 4 or more of the above

File Description	Documents
Upload any additional information	View File
Details of subscriptions like e- journals,e-ShodhSindhu, Shodhganga Membership etc (Data Template)	View File

4.2.3 - Expenditure for purchase of books/e-books and subscription to journals/e-journals during the year (INR in Lakhs)

4.2.3.1 - Annual expenditure of purchase of books/e-books and subscription to journals/e-journals during the year (INR in Lakhs)

10.46

File Description	Documents
Any additional information	<u>View File</u>
Audited statements of accounts	<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 - Number per day usage of library by teachers and students (foot falls and login data for online access) (Data for the latest completed academic year)

4.2.4.1 - Number of teachers and students using library per day over last one year

277

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

4.3 - IT Infrastructure

4.3.1 - Institution frequently updates its IT facilities including Wi-Fi

All departments and laboratories are connected through L3 and L2 switches with ring topology. All the computers are connected over LAN and to the data centre through 59GB network switches. 175Mbps Internet connectivity is shared across the campus, where 150Mbps is shared for the students.

Data centre is working 24x7 without any interruption. Computers are protected from virus and other threats using Sophos hardware firewall. Data centre supported with uninterrupted power supply. Windows volume license, MS office, visualstudios, MS SQL server, Oracle, Rational suite enterprise, SPSS, MATLAB, ORCAD, ADS, NS2, Pspice, Labview, Cadence, E-pro licenses, open source operating systems such as Ubuntu, CentOS, Fedora etc. and also some open source softwares are used by different departments and protected with K7 Endpoint security and 360 Total security.

Wi-Fi access is provided to the students and faculty.
Individual Wi-Fi access point is operative in each block.
Additional Wi-Fi access points have been created in various places such as library, hostels and administrative buildings.
All access points are routed to Unify Wi-Fi controller in the data centre where configuration and updates are maintained in a centralized fashion.

Updates are maintained regularly through Windows Server Update Service(WSUS) and anti-viruses are updated through cloud portal

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://saranathan.ac.in/IQAC/AQAR2021/C4 _3_1.pdf

4.3.2 - Number of Computers

699

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

4.3.3 - Bandwidth of internet connection in the Institution A. ? 50MBPS

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

4.4 - Maintenance of Campus Infrastructure

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

513.46

File Description	Documents
Upload any additional information	<u>View File</u>
Audited statements of accounts	<u>View File</u>
Details about assigned budget and expenditure on physical facilities and academic support facilities (Data Templates)	<u>View File</u>

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

The laboratories are furnished, relevant safety precautions are displayed in each laboratory. Separate registers maintained for stock, break down service and maintenance. Regular cleaning of the machines, break down services and instruments are calibrated periodically. Consumables are purchased every six months. Safety aids are provided wherever necessary.

Classrooms

The classroom furniture, Projectors and equipments are checked periodically and maintained properly. The cleaning of class room is done every day.

Sports

Regular maintenance of the play area and the sports facilities is under the supervision of Physical education director. If any damage is observed, the same is recorded in the register and further action taken.

IT

Hardware trouble shooting, software installation, Maintaining Biometric devices and network related issues are monitored and maintained by IT help desk. The complaints posted through E-mail are addressed and resolved immediately.

Library

There is regular stock verification process carried out. Library advisory committee helps in guiding the library and meets at regular intervals for selection of books and materials. Books which are in circulation can be reserved and it will not be renewed and reissued. If the books are lost, then the borrower, after getting the approval of the Principal, replaces the books or pay double

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	http://saranathan.ac.in/IQAC/AQAR2021/C4_4_2.pdf

STUDENT SUPPORT AND PROGRESSION

5.1 - Student Support

- 5.1.1 Number of students benefited by scholarships and free ships provided by the Government during the year
- 5.1.1.1 Number of students benefited by scholarships and free ships provided by the Government during the year

-	\wedge		А
	U	O	4

File Description	Documents
Upload self attested letter with the list of students sanctioned scholarship	<u>View File</u>
Upload any additional information	<u>View File</u>
Number of students benefited by scholarships and free ships provided by the Government during the year (Data Template)	<u>View File</u>

5.1.2 - Number of students benefitted by scholarships, free ships etc. provided by the institution / non- government agencies during the year

5.1.2.1 - Total number of students benefited by scholarships, free ships, etc provided by the institution / non- government agencies during the year

8

File Description	Documents
Upload any additional information	<u>View File</u>
Number of students benefited by scholarships and free ships institution / non- government agencies in last 5 years (Date Template)	<u>View File</u>

5.1.3 - Capacity building and skills enhancement initiatives taken by the institution include the following: Soft skills Language and communication skills Life skills (Yoga, physical fitness, health and hygiene) ICT/computing skills

A. All of the above

File Description	Documents
Link to Institutional website	
	https://assessmentonline.naac.gov.in/stor
	age/app/public/agar/14931/14931_149_360.p
	df?1646633632
Any additional information	<u>View File</u>
Details of capability building and skills enhancement initiatives (Data Template)	<u>View File</u>

5.1.4 - Number of students benefitted by guidance for competitive examinations and career counseling offered by the institution during the year

2035

5.1.4.1 - Number of students benefitted by guidance for competitive examinations and career counseling offered by the institution during the year

2035

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 has a transparent mechanism for timely redressal of student grievances including sexual harassment and ragging cases Implementation of guidelines of statutory/regulatory bodies Organization wide awareness and undertakings on policies with zero tolerance Mechanisms for submission of online/offline students' grievances Timely redressal of the grievances through appropriate committees

A. All of the above

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

5.2 - Student Progression

5.2.1 - Number of placement of outgoing students during the year

5.2.1.1 - Number of outgoing students placed during the year

323

File Description	Documents
Self-attested list of students placed	<u>View File</u>
Upload any additional information	<u>View File</u>
Details of student placement during the year (Data Template)	<u>View File</u>

5.2.2 - Number of students progressing to higher education during the year

5.2.2.1 - Number of outgoing student progression to higher education

20

File Description	Documents
Upload supporting data for student/alumni	<u>View File</u>
Any additional information	<u>View File</u>
Details of student progression to higher education	<u>View File</u>

$5.2.3-Number\ of\ students\ qualifying\ in\ state/national/\ international\ level\ examinations\ during\ the\ year\ (eg:\ JAM/CLAT/GATE/\ GMAT/CAT/GRE/\ TOEFL/\ Civil\ Services/State$

government examinations)

5.2.3.1 - Number of students qualifying in state/ national/ international level examinations (eg: JAM/CLAT/NET/ SLET/ GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/ State government examinations) during the year

10

File Description	Documents
Upload supporting data for the same	<u>View File</u>
Any additional information	<u>View File</u>
Number of students qualifying in state/ national/ international level examinations during the year (Data Template)	<u>View File</u>

5.3 - Student Participation and Activities

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

8

File Description	Documents
e-copies of award letters and certificates	<u>View File</u>
Any additional information	<u>View File</u>
Number of awards/medals for outstanding performance in sports/cultural activities at uni versity/state/national/internatio nal level (During the year) (Data Template)	<u>View File</u>

5.3.2 - Institution facilitates students' representation and engagement in various administrative, co-curricular and extracurricular activities (student council/ students representation on various bodies as per established processes and norms)

Saranathan College of Engineering believes that improvement is possible only with the association of all the stakeholders of

the Institute- the students, their parents, the faculty and the management.

Students act as class committee meeting member, President, Vice President, Secretary, Joint Secretary and Treasurer for decisive role in the execution of the club activities. Yearly once Quality Improvement Cell (QIC) organizes a Multidisciplinary project expo for students. Entrepreneurship Development Cell (EDC) is to create an awareness and motivation among the students to explore the field of entrepreneurship. Extracurricular activities are available to the students in the form of Sports, cultural and Photography and many clubs like Youth Red Cross, National Social Service, Red Ribbon Club, and Women Empowerment cell, Fine arts Association, Health club and Eco club are also the part of student activities. Due to covid situation some of the programs functioned in online. Women Empowerment Cell of SCE, joined hands with ICT ACADEMY and DXC technologies in CSR Initiative-Women Empowerment program. 100 girl students from our college have joined and undergoing skill development training courses to improve their employability skills. The WEP is a 200 Hours program-100 Hours of self learning and 100 Hours of Instructor Lead Training.

File Description	Documents
Paste link for additional information	http://saranathan.ac.in/IQAC/AQAR2021.php
Upload any additional information	<u>View File</u>

5.3.3 - Number of sports and cultural events/competitions in which students of the Institution participated during the year (organized by the institution/other institutions)

5.3.3.1 - Number of sports and cultural events/competitions in which students of the Institution participated during the year

8

File Description	Documents
Report of the event	<u>View File</u>
Upload any additional information	<u>View File</u>
Number of sports and cultural events/competitions in which students of the Institution participated during the year (organized by the institution/other institutions (Data Template)	<u>View File</u>

5.4 - Alumni Engagement

5.4.1 - There is a registered Alumni Association that contributes significantly to the development of the institution through financial and/or other support services

Saranathan College of Engineering has an engaged alumni network which allows the college to benefit from the skills and experience of our graduates. Alumni of our college are invited during various occasions and organize an interaction session with students. During Alumni interaction, our alumni offer their support to our students in building a bridge between college life and career life.

Our alumni interaction also helps in various ways such as

- To encourage and guide the students of our college on self-employment to become entrepreneurs.
- To promote the industry-institute interaction to bridge the gap between industry requirements and education offered and enhance students' employability.
- To provide job opportunities to fresh bachelors through references of alumni professionals.
- To polish the soft skills and enhance the same for a better and more career centric options.

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

5.4.2 - Alumni contribution during the year

(INR in Lakhs)

File Description	Documents
Upload any additional information	No File Uploaded

GOVERNANCE, LEADERSHIP AND MANAGEMENT

6.1 - Institutional Vision and Leadership

6.1.1 - The governance of the institution is reflective of and in tune with the vision and mission of the institution

Vision

Impart an inclusive engineering education that beyond being a facilitator for a career and rudimentary skills, equips the students to offer ethically & environmentally conscious solutions to societal issues.

Mission

Develop the Institution into a Model Self Financing College of Engineering and Technology. Deliver Professional Training to our students with state-of-the art Laboratories and convert them into Technocrats of international repute.

- 1. Create a nurturing, holistic environment of engineering education to facilitate every student realize their full potential.
- 2. Strive to make the students strong in basic concepts armed with appropriate skills to enhance one's ability to apply the knowledge and provide solutions to real time issues.
- 3. Maintain an ambience that facilitates the students to strengthen their ethical value systems.
- 4. Actively promote R&D and institute-industry interaction.

The vision statement of SCE is about imparting engineering education that includes fundamental knowledge along with ethical skills thus providing quality education. The mission statement defines and specifies how the institution plans to fulfill its Vision. During the process of delivering the vision it has set itself an additional benchmark of becoming a model self-financing institution without compromising on its core ethical values.

File Description	Documents
Paste link for additional information	http://www.saranathan.ac.in/IQAC/AQAR2021 /C6 1 1 ii.pdf
Upload any additional information	<u>View File</u>

6.1.2 - The effective leadership is visible in various institutional practices such as decentralization and participative management.

- The institution practices decentralization and participatory management in keeping with its belief in collective leadership and democratic traditions. A particular reflection of this practice may be seen in the extensive delegation of authority to the Heads of the various Departments.
- The Ways in which Heads of Departments participate in the Management Process:
 - The Head of the Department oversees the Teaching Plans of his/her departmental faculty members.
 - He/she can convene departmental meetings where the Programmes for the entire term are decided.
 - He/she organizes and conducts the Parent-Teacher and mentor mentee meetings in which the academic progress of the students is discussed with the students and/or communicated to their guardians.
 - He/she, in consultation with his/her department oversees the paper-setting, moderation, evaluation, and marks submission of all internal examinations of the department in the Sara portal, and determines the internal marks of the students.

These committee heads are encouraged to form their own teams and come up with plans to deliver the targets of the individual committees. Efforts are made to ensure that there is adequate rotation of such committee heads so that all faculty members get a taste of this team building exercise.

File Description	Documents
Paste link for additional information	http://www.saranathan.ac.in/IQAC/AQAR2021 /C6 1 2 ii.pdf
Upload any additional information	<u>View File</u>

6.2 - Strategy Development and Deployment

6.2.1 - The institutional Strategic/perspective plan is effectively deployed

Role of Training and Placement in the Institution

The Department of Training and Placement plays a crucial role in finding job opportunities for Graduates graduating from the college. This is done by keeping in touch with reputed firms and industrial establishments. The department operates round the year to facilitate contacts between companies and graduates. In order to bridge the gap between academics and company expectations and also to make the students industry ready, the department has strategized and deployed a training system.

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 with the values of - 'Sincerity', 'Hard Work' and 'Ethics'.

To attain the above stated goal, the following key plans of action have been framed:

- To establish a link between students, alumni and the employers' community.
- To impart knowledge related to placement including verbal, aptitude, and reasoning skills as part of the regular academics and periodically evaluate the learning curve through assessments.
- To organize Aptitude & Soft skills Training Programs to prepare students to face Campus Recruitment process.
- Implementation and outcomes are discussed in additional information.

File Description	Documents
Strategic Plan and deployment documents on the website	<u>View File</u>
Paste link for additional information	http://www.saranathan.ac.in/IQAC/AQAR2021 /C6_2_1_iii.pdf
Upload any additional information	<u>View File</u>

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

Saranathan College of Engineering was established by "VidyaSevaRatnam", "Guru Seva Mani" Auditor Sri. K. Santhanam in the year 1998. It was so named in respectful memory of his Guru Principal Saranathan, the Principal of National College, Tiruchirappalli, Tamil Nadu. Saranathan is a self-financing Engineering college approved by AICTE and affiliated to Anna University, Chennai.

As per AICTE Norms the Governing Council is functioning under the Secretary (as the Chairman) and Principal of the College for effective administration and control. The institution has policies, administrative setup, and appointment and service rules for proper functioning.

The organizational structure of Saranathan College of Engineering (SCE) including, Governing Council are described as follows.

The Governing Council comprises of 14 Members and is represented by Chairman / Secretary of the Institute. The Secretary accomplishes the academic and administrative activities of SCE and convenes the Governing Council meeting once in a year or as and when required. All important policy decisions are taken by the Chairman of Governing Council of SCE.

For the proper functioning of Institute, the hierarchy is maintained as per the organization chart and responsibilities carried out at all the levels.

File Description	Documents
Paste link for additional information	http://www.saranathan.ac.in/IQAC/AQAR2021 /C6 2 2 ii.pdf
Link to Organogram of the institution webpage	http://www.saranathan.ac.in/IQAC/AQAR2021 /C6_2_2_iii.pdf
Upload any additional information	<u>View File</u>

6.2.3 - Implementation of e-governance in

A. All of the above

areas of operation Administration Finance and Accounts Student Admission and Support Examination

File Description	Documents
ERP (Enterprise Resource Planning)Document	<u>View File</u>
Screen shots of user inter faces	<u>View File</u>
Any additional information	<u>View File</u>
Details of implementation of e- governance in areas of operation, Administration etc(Data Template)	<u>View File</u>

6.3 - Faculty Empowerment Strategies

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

Institute has various welfare measures to encourage and empower the faculty members. The effective measures support them to meet their academic and personal goals.

The following are the welfare measures taken by the institute,

- Subsidized transport facilities to and from home to college and car facilities for senior staff members.
- Family Get-togethers
- Motivational Talk on Teachers' Day.
- A birthday gift voucher is given to all faculty members on their birth date.
- Financial assistance for FDP and workshop.
- On-duty for attending workshop, FDP, Conferences.
- Institution provides free lunch services to minimum of twenty members in the institute.
- Employment Provident Fund (EPF).
- Insurance scheme facility.
- Fee concession/scholarships for the children of faculty members.
- Maternity Leaves to female staff with salary.
- Facility of Wi-Fi in campus.
- Study leave to purse part time Ph.D.
- Ph.D. Increments to Teaching staff
- Reprographic facility (Xerox).

- Travel grand for official works.
- Marriage gifts.

File Description	Documents
Paste link for additional information	http://www.saranathan.ac.in/IQAC/AQAR2021 /C6 3 1 iv.pdf
Upload any additional information	<u>View File</u>

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

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

- 6.3.3 Number of professional development /administrative training programs organized by the institution for teaching and non-teaching staff during the year
- 6.3.3.1 Total number of professional development /administrative training Programmes organized by the institution for teaching and non teaching staff during the year

13

File Description	Documents
Reports of the Human Resource Development Centres (UGCASC or other relevant centres).	<u>View File</u>
Reports of Academic Staff College or similar centers	<u>View File</u>
Upload any additional information	<u>View File</u>
Details of professional development / administrative training Programmes organized by the University for teaching and non teaching staff (Data Template)	View File

6.3.4 - Number of teachers undergoing online/face-to-face Faculty development Programmes (FDP) during the year (Professional Development Programmes, Orientation / Induction Programmes, Refresher Course, Short Term Course etc.)

6.3.4.1 - Total number of teachers attending professional development Programmes viz., Orientation / Induction Programme, Refresher Course, Short Term Course during the year

107

File Description	Documents
IQAC report summary	<u>View File</u>
Reports of the Human Resource Development Centres (UGCASC or other relevant centers)	<u>View File</u>
Upload any additional information	<u>View File</u>
Details of teachers attending professional development programmes during the year (Data Template)	View File

6.3.5 - Institutions Performance Appraisal System for teaching and non-teaching staff

Performance Appraisal system consisting of various phases is done on a specific format annually and confidentially. The principal evaluate the submitted self-appraisal form. A selfappraisal form is formatted for Principal, HoDs, Professor, Associate Professor, Assistant Professor level.

Performance appraisal of non-teaching staff is done based on report from the Department.

Performance appraisal of teaching and non teaching staff is evaluated on the basis of following points,

- 1. Academic Execution.
- 2. Academic Innovation.
- 3. Publication/patent, Research, Consultancy and prominent Institute-Industry interactions.
- 4. Prominent external interaction/recognition including representing institution in university committees (BOS etc..).

Self-appraisal form duly filled in by the faculty is submitted to HoD. HoD will submit the format to the evaluation committee along with their comments on the concerned faculty. HOD has to submit their Self Appraisal form to Principal. Principal will review the forms by considering factors such as loyalty to institute, frequency of taking leave, special permissions, and mentoring ability.

After evaluation the fitness of the concerned faculty to continue in the present position or fitness for promotion is determined and documented. If any undesirable performance is noticed, the same is reported to the concerned faculty along with suggestions for necessary improvements.

File Description	Documents
Paste link for additional information	http://www.saranathan.ac.in/IQAC/AQAR2021 /C6 3 5 ii.pdf
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 Enumerate the various internal and external financial audits carried out during the year with the mechanism for settling audit objections within a maximum of 200 words

Every academic year, Head of the Institution convenes a meeting of the Heads of the Department, Training and Placement Head and Central Librarian Head to discuss the budget requirements on Recurring and Non-recurring expenses, Student development, Faculty development, Research and Development, Operation and Maintenance, Infrastructure development, Furniture, Training and Travel expenses. These expenses are projected based on intake of the students and future development plans of the Institution. The prepared budget is scrutinized by the Head of the Institution and submitted to the Governing Council for approval. The budget is approved by the Governing Council after having discussion with the Head of the Institution.

After the budget approval, the Head of the Institution convenes a meeting to discuss the action plan for procurement of the budgeted requirements. Actions for procurement of lab equipment, up-gradation of existing lab facilities, purchase of consumables etc., are initiated by the respective departments based on the allotted budget. The allocated funds are utilized effectively to meet the expenses such as staff salary, infrastructure development, purchase of equipment, etc. The management monitors the utilization of financial resources by regular and periodical reviews. The accounts of the college are audited externally by chartered accountant regularly.

File Description	Documents
Paste link for additional information	http://www.saranathan.ac.in/IQAC/AQAR2021 /C6 4 1 i.pdf
Upload any additional information	<u>View File</u>

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

6.4.2.1 - Total Grants received from non-government bodies, individuals, Philanthropers during the year (INR in Lakhs)

	21	т.
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File Description	Documents
Annual statements of accounts	No File Uploaded
Any additional information	No File Uploaded
Details of Funds / Grants received from of the non- government bodies, individuals, Philanthropers during the year (Data Template)	No File Uploaded

6.4.3 - Institutional strategies for mobilization of funds and the optimal utilization of resources

Mobilisation of funds

The institution has a proper channel to generate funds for the smooth running of the institute in a sustainable way. This finance generated supports the Institution to meet its vision and mission.

Optimal Utilization of resources

Our institute has well defined financial monitoring system to monitor the optimal utilization of funds in a centralized manner. Institute follows a centralized management system for effective utilization of resources. Resource utilization for Infrastructure development, teaching and learning process, and other supplementary is done through proper centralized channel for optimal utilization. Resource available in institute premises is shared by all the departments such as seminar halls, computer labs, laboratories and supplementary components based on availability.

Mobilized funds are optimally utilized for various expenses comes under recurring and non-recurring expenses, salary for teaching, non teaching staff members and other expenses which includes Student development, Faculty development, Research and Development, Operation and Maintenance, Infrastructure development, Furniture, Training and Travel expenses, purchase of books for central and department library, transport, day-to-day administration, hostel and maintenance expenses etc.,

The students can utilize the budgeted amount in their development of co-curricular and extracurricular activities.

File Description	Documents
Paste link for additional information	http://www.saranathan.ac.in/IQAC/AQAR2021 /C6 4 1 i.pdf
Upload any additional information	<u>View File</u>

6.5 - Internal Quality Assurance System

6.5.1 - Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing the quality assurance strategies and processes

The primary objective of IQAC is to develop a system for consistent improvement in the performance of institution and thus achieve academic excellence. The quality assurance strategies and processes practiced in our institution are described below.

NPTEL Resource

NPTEL video resources available in the form of Hard Disc and the contents are also available in our institution intranet. More than 183 video courses available in various Engineering and Science disciplines. This facility has been available in our campus since February 2013. From February 2013 onwards our faculty members and students have registered for many of these NPTEL courses and taken those exams. Many have been certified in those NPTEL courses with good scores.

Spoken Tutorial

The institution is registered with IIT, Bombay Spoken tutorial team, and several departments have conducted various phases of training in Spoken tutorial. The process is continued effectively. From spoken tutorial website 20 open source software and 20 related tutorials are downloaded and stored in DVDs. Tutorials in Tamil version are available for some of the software. All the 15 video Tutorials have been downloaded and all such downloaded Tutorials are accessible in our Digital library.

File Description	Documents
Paste link for additional information	http://www.saranathan.ac.in/IQAC/AQAR2021 /C6_5_1_ii.pdf
Upload any additional information	<u>View File</u>

6.5.2 - The institution reviews its teaching learning process, structures & methodologies of operations and learning outcomes at periodic intervals through IQAC set up as per norms and recorded the incremental improvement in various activities

Two examples of institutional reviews and implementation of teaching learning reforms initiated by IQAC are on Outcome-Based Education and Academic auditing.

1. Outcome-Based Education is a student-centric teaching and learning methodology in which the course delivery, assessment are planned to achieve objectives and outcomes. It focuses on measuring student performance i.e. outcomes at different levels based on Blooms Taxonomy (BT).

BT was created to provide the classic definition of the levels of educational activity, from the very simple like memorizing facts to the more complex such as analyzing or evaluating information. Training in Blooms Taxonomy is done to upgrade the teaching skills and formulation of question papers. In addition, six departments of our institution has accredited by NBA for 3 years from 2018-2021.

- 2. Academic auditing is carried out in various levels to enhance the quality of teaching and learning process.
 - Academic planner for every semester is prepared as per Anna university norms.
 - Course materials, lab manuals, assessment test question papers are prepared and the mode of delivery of lectures by faculty members before the commencement of semester and checked by academic committee.

Faculty members incorporate changes suggested by the academic committee to ensure quality deliverables.

File Description	Documents
Paste link for additional information	http://saranathan.ac.in/IQAC/AQAR2021/C6_ 5_2_ii.pdf
Upload any additional information	<u>View File</u>

6.5.3 - Quality assurance initiatives of the institution include: Regular meeting of Internal Quality Assurance Cell (IQAC); Feedback collected, analyzed and used for improvements Collaborative quality initiatives with other institution(s) Participation in NIRF any other quality audit recognized by state, national or international agencies (ISO Certification, NBA)

A. All of the above

File Description	Documents
Paste web link of Annual reports of Institution	http://www.saranathan.ac.in/IQAC/AQAR2021 /C6_5_3.pdf
Upload e-copies of the accreditations and certifications	<u>View File</u>
Upload any additional information	<u>View File</u>
Upload details of Quality assurance initiatives of the institution (Data Template)	<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

Women Empowerment Cell of Saranathan College of Engineering (SCE), Trichy was inaugurated on 26.11.2013 by Dr.Gayathri Mathroobootham, M.B.B,S., Gynaecologist. Various programmes are conducted in our college through WEC. SCE organized a voluntary pap smear test as a token of respect for women on account of women's day celebration to raise awareness about cervical cancer among female staff members. Female staff members above

35 years of age undergone pap smear test for free of cost on March 06, 2021. The screening test was carried out in Shyamala Nursing Home, and Lalitha Nursing Home, Trichy.WEC of SCE also joined in hands with ICT ACADEMY and DXC technologies in CSR Initiative- Women Empowerment program. 100 girl students from our college have joined and undergoing skill development training courses to improve their employability skills. The WEP is a 200 Hours program-100 Hours of self learning and 100 Hours of Instructor Lead Training.SCE has formed a Committee for Prevention of Sexual Harassment (POSH) under the recommendation of the Anna University, Chennai. All-Hour all round security service provided both at college and in the hostel to ensure safety of girl students. Mini-computer center with 10 Mbps Wi-Fi connectivity is available for girls at hostel.

File Description	Documents
Annual gender sensitization action plan	https://www.saranathan.ac.in/IQAC/AQAR202 1/C7_1_1_ii.pdf
Specific facilities provided for women in terms of:a. Safety and security b. Counseling c. Common Rooms d. Day care center for young children e. Any other relevant information	https://www.saranathan.ac.in/IOAC/AOAR202 1/C7 1 1 i.pdf

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

A. 4 or All of the above

File Description	Documents
Geo tagged 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 200 words) Solid waste management Liquid waste management Biomedical waste management E-waste management Waste recycling system Hazardous chemicals and radioactive waste management
 - Solid garbage is collected at our institution by

arranging separate dust bins for biodegradable and non-biodegradable waste at distinct locations.

- The Tiruchirappalli City Corporation receives the segregated trash.
- For manure preparation, we use garden cuttings from our campus garden as well as cow dung from our cattle.
- They're dumped in the compost pile, and the manure is used to fertilise our campus's trees.
- · At our institution, we use paperless communication.

Waste water from our women's dormitory is used for fodder cropping, and the resulting sludge is used as fodder manure. Our college canteen's waste water is collected separately and used to water trees on campus.

Sprinklers have been erected in our college garden to ensure that water is used in a controlled manner.

Sanitary napkins from the ladies restroom are disposed by incinerating in the Sanitary Napkin Incinerator.

ChemicalBottlesfor disposal which is handled by the Facility Management Division.

- In addition to hardware recycling solutions for e-waste management, we encourage our students to "Live in the Cloud."
- At our campus, the most common forms of e-waste are old computer monitors, printer cartridges etc.
- We regularly advise students on how to properly handle ewaste in order to reduce waste generation.

File Description	Documents
Relevant documents like agreements / MoUs with Government and other approved agencies	<u>View File</u>
Geo tagged photographs of the facilities	<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

A. Any 4 or all of the above

bodies and distribution system in the campus

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

7.1.5 - Green campus initiatives include

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

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

File Description	Documents
Geo tagged 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 are regularly undertaken by the institution

7.1.6.1 - The institutional environment and
energy initiatives 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

C. Any 2 of the above

File Description	Documents
Reports on environment and energy audits submitted by the auditing agency	<u>View File</u>
Certification by the auditing agency	<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 disabled-friendly, barrier free environment Built environment with ramps/lifts for easy access to classrooms. Disabled-friendly washrooms Signage including tactile path, lights, display boards and signposts Assistive technology and facilities for persons with disabilities (Divyangjan) accessible website, screen-reading software, mechanized equipment 5. Provision for enquiry and information: Human assistance, reader, scribe, soft copies of reading material, screen reading

A. Any 4 or all of the above

File Description	Documents
Geo tagged photographs / videos of the facilities	<u>View File</u>
Policy documents and information brochures on the support to be provided	<u>View File</u>
Details of the Software procured for providing the 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 socioeconomic and other diversities (within 200 words).

Saranathan celebrates Navarathri festival every year to seek the blessings from goddess Durga. To commemorate the birthday of our Founder Secretary Vidya Seva Ratnam, Guru Seva Mani, Auditor K. Santhanam, Saranathan Women Empowerment Cell organizes free PapSmears check-up to our ladies faculty at free of cost to create awareness to prevent progression to cervical cancer, Under the stewardship of Dr. N. Gayathri (M.D, D.N.B.) from Trichy. In connection with Independence day celebration, NSS unit of Saranathan conducts a Mass tree plantation programme in the college premises. Staff and students of NSS unit of the college participate in the tree plantation activity and plant the trees. 'Mantraanaam Oushadham Yajusham' is one of the Vedas that deals with sounds that can heal. Chanting Yajur Vedic mantras can help alleviate mental illnesses such as depression and enhance confidence, resulting in mental tranquilly.

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

7.1.9 - Sensitization of students and employees of the Institution to the constitutional obligations: values, rights, duties and responsibilities of citizens

The institution's different activities for instilling principles for being responsible citizens as stated in the Indian Constitution. Anna University, Chennai, has awarded Saranathan College of Engineering's NSS Unit the Best Unit Award for their commendable various contributions.

As part of a Corporate Social Responsibility "Interview Skills" Motivational session was held on 24th Sep 20 and "Distribution of face mask" to adopted Nagamangalam village People on 27th Sep 20.

Dr. G. Anitha, Dean of K.A.P. Viswanatham Medical College, and Dr. S.Dhanapaul, Head and Professor of K.A.P. Viswanatham Medical College, presented an awareness workshop on the Covid-19 Virus, in which the participants were sensitised on safety measures to battle Covid-19. At free cost, Free Vaccination camp was organised in M/s Lalitha Nursing home, Trichy. International Yoga day, NSS Day Celebration and Fit India movement day was celebrated on different date during this pandemic from home.

File Description	Documents
Details of activities that inculcate values; necessary to render students in to responsible citizens	https://www.saranathan.ac.in/IQAC/AQAR202 1/C7_1_8_i.pdf
Any other relevant information	https://www.saranathan.ac.in/IQAC/AQAR202 1/C7 1 8 ii.pdf

7.1.10 - The Institution has a prescribed code of conduct for students, teachers, administrators and other staff and conducts periodic 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 4. Annual awareness programmes on Code of Conduct are organized

A. All of the above

File Description	Documents
Code of ethics policy document	<u>View File</u>
Details of the monitoring committee composition and minutes of the committee meeting, number of programmes organized, reports on the various programs 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

Our institution commemorates Days of National Importance such as Independence Day, Republic Day, and the death and birth anniversaries of famous figures in order to build a better India. Our institution commemorates these days of national significance to remember historical events or our leaders' contributions to the nation's development. On these occasions, we hold guest lectures, competitions, project presentations,

and quiz competitions in order to mould our students into the top engineers in the country. The fundamental goal of these activities is to instill in the brains of young engineers the ideas of great Indian characters. National Science Day is celebrated on each year to mark the discovery of the Raman's Effect by Indian Physicist Sir C. V. Raman. Different events is organized at Inter school level to explore the talents of kids .National Mathematics Day is celebrated on every year to mark the birth anniversary of legendary Indian mathematician, Srinivasa Ramanujan and his contributions to the field of mathematics. On this occasion our institution organizes guest lecturers to explore the application of mathematics in various fields.

File Description	Documents
Annual report of the celebrations and commemorative events for the last (During the year)	<u>View File</u>
Geo tagged 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 - Describe two best practices successfully implemented by the Institution as per NAAC format provided in the Manual.

BEST PRACTICES - I Research Initiatives

- 1. Title of the Practice: Inculcate a Research Culture among Faculty and Students.
- 2. Objectives of the Practice To provide an exposure to the world of research works in various engineering disciplines to the faculty and students to pursue research works in their fields of interest. To motivate the budding engineers to forecast the present and future problems and provide optimal solutions in various domains of engineering and technology and to stay update with the recent advancements. To bridge the industry-institute gap. To enhance the ability of the faculty members and students to publish their research articles in the refereed journals and international conferences. Make students aware of the various available research avenues •

- 3. The Context Since there is always a demand for the optimal and user-friendly solutions for problems in the real world, it becomes necessary to create a culture of research in all. For successful existence of such research culture, along with strengthening the core concepts and working principles of conventional systems, an ambience must be created in which optimal and innovative solutions can be delivered. The present real-world problems demands socially relevant solutions. This automatically creates the need for research to be multidisciplinary in nature. In these days of high obsolescence in technology an ability to "think out of the box" becomes an essential skill to solutions that are socially relevant. There is a need for the institution to train the students to meet such exacting expectations.
- 4. Practice The management of SCE motivates all the faculty members to pursue research in their areas of specializations and publish their research articles in the refereed journals and conferences. • As an additional facility to motivate faculty members, UG and PG students access provision is given to the research articles appearing in the leading publications such as IEEE and ASME through the digital library. The research scholars both part time and full time, are recognized by the management with cash awards depending on the milestones achieved. • The concept of "in- house final year projects" creates a possibility for the students to work in campus as well as to explore experiential learning. • The internal competitions and Project exhibitions conducted under the banner of Science Day and Engineers Day provide platforms for the students to start their research-oriented thinking in low level. This modest beginning helps the students to participate aggressively in larger hackathons and research competitions such as Smart India Hackathon, Solar/non fossil fuel vehicle development projects etc. • Today's problems are multi-pronged. Therefore, they need a multi-disciplinary approach to finding solution(s). To bring objectivity, multi-disciplinary projects are evaluated by technical experts from leading industries in that line or allied line of business. The inputs and feedback received from such experts go a long way in our students coming up industry acceptable solutions. • ECE, EEE & Mechanical Engineering departments could obtain "Anna University Recognized Research Centre" status based on the Facilities available in their respective PG research labs. Through these research centres, registration of academic research works, Doctoral committee meetings, Comprehensive Viva - voce and Thesis Submission are being carried out. These research centres

have also paved the way for Memorandum of Understandings with the Leading industries, Centres of Excellence to promote industry-institute partnership and to offer courses through value added laboratories such as NI Labview, eYantra. • All these have resulted in our student teams ably mentored by the faculty win laurels and recognitions in various competitions that are research based with the innovations in design and working prototype model. Majority of these prizes are cash awards. The institution incentivizes such efforts by offering a cash award which is equal to that of the cash prize won by the team.

- 5. Evidence of Success The number of research publications in the indexed journals by the faculty members and students. Research scholars have been awarded with the PhD Degrees through the AU recognized research centres by different departments. Scholars are pursing research works in part time and full time mode under the supervision of our faculty members recognized as research guides by the affiliating university. These are the irrefutable evidence for the fact that the institutions efforts at creating grass-root research thinking are bearing fruit.
- 6. Problems Encountered and Resources Required Being affiliated to a university, students from our institution are mandatorily expected to follow the traditional instructional method of learning and the common exam centric approach. This necessitates operating every semester under a stretched academic schedule. Thus it becomes necessary that value added courses on the emerging trends and tools can be conducted only after college hours or during semester holidays. But the technological advancements and the prototypes require the exposure and detailed knowledge of modern tools along with the abstract theoretical knowledge. Hence a balancing act has to be performed between providing hands-on experience on the usage of modern tools and the regular academic schedule. Funding research proposals, funding proposals for modernization of Labs, meeting the ever-increasing demand for research facilities with necessary software and hardware are the challenges to be met with the help of government funding agencies such as CSIR, DST and TNSCST.

BEST PRACTICES - II ERP Implementation 1. Title of the Practice Implementation of Sara Portal (ERP)

2. Goal/Objective of the Practice An integrated platform is

required for maintaining academic records of the students, academic activities of the departments and for accessing them conveniently. Our college motivated the faculty members and students to develop such platform. SCE has developed an Institution ERP for timely availability of data which can be accessed through Intranet. The Sara Portal has been implemented for the past ten years and is very user friendly. This has been very helpful in improving the performance of the institution.

- 3. The Context Saranathan always utilizes In-house resources and talents for developing software, designing advertisement materials and information brochures. Sara Portal has been developed for effective and End-to-End Campus Management. The aim is to inculcate management practices among these students as well as optimum utilization of the available resources. Most of the college related advertisements, posters and banners are designed by creative students under the guidance of faculty members.
- 4. The Practice: The staff of SCE has created an Intranet portal called "Sara Portal" which maintains most of the administrative and academic details. This is to provide them hands-on practice as well as improve the administrative involvement in SCE's daily academic works. The Sara Portal is hosted in datacentre for easy access from anywhere with role based access. The main features of this Portal are: ? Access to information regarding status of each and every student to all academic stakeholders including Director, Principal, Deans, HoDs, Faculty and Students. ? Sarastaff module: ● Every semester, the faculty members can map COs and POs for their subjects. • The availability of academic records like attendance, internal assessment test marks, subject wise failure list of the students help the faculty to provide proper guidance and counselling. • The status of missing attendance entry, mark entry at the department level allows the HODs to undertake necessary follow up actions. • Sara Portal has many features like Continuous assessment mark calculation, Internal Assessment Test Performance analysis, Attainment calculation, etc. • The Curriculum and Syllabus of current regulations of Anna University and NPTEL study materials are available for all branches. • The strength and name list of every class, feedback given by the students, details of library books borrowed, details of bus facility availed by students & staff are provided in the Portal. • Faculty members can update their profiles at any time about conferences, seminars, and publications in journals and conferences, which will appear in

the faculty database. ? Sarahome module for students • The students can access their academic details like attendance, Internal assessment test marks, University grades, their ranking in the class. • The students provide feedback about the staff members handling the subjects for the semester twice during every semester. • Course exit survey is given by the students for the subjects based on the course outcomes at the end of every semester. ? The students of our college are encouraged to design information brochure, advertisements, posters, leaflets, promotional material, etc. ? Most of the staff communications are (i) through mail which was created in Gmail under the domain name of saranathan and (ii) whatsapp group. ? The staff members of our college are instrumental in the design, development and maintenance of our College Web Site .Online payment facilities for paying Tuition fees, University Exam fees, hostel fees, etc. are provided through the website.

- 5. Evidence of Success: ? Management is able to get the data on all activities of the college on time which helps in decision making process. ? As the data is available always, enormous amount of time and effort is saved in reworking. At same time, data can be reused for any type of report generation. The faculty members are able to spend time for Research and other development activities. ? Faculty members are able to acquire time to concentrate on slow learners. ? The cost of procuring materials is reduced in bringing the system across the Institution. ? Students and parents feel comfortable in accessing the information. ? The staff members can easy project the performance of the students to parents during Parent Teachers Meet. ? Additionally, the students have developed the following software module which is hosted our website: o Seminar Hall Booking o Content Creation / Video Creation ? Online payment helps to monitor and keep track of payments in a better way.
- 6. Problems Encountered and Resources Required: SCE has not encountered major problems in implementing the Intranet based Sara Portal. Problems Encountered: Certain advanced software require sophisticated technical configuration for the implementation of the institution Website. Non availability of the system due to network issues at times. Resources Required: Knowledge on how to frequently upgrade the existing system, in order to keep abreast with the latest technologies.

File Description	Documents
Best practices in the Institutional website	https://www.saranathan.ac.in/IQAC/AQAR202 1/C7_2_1.pdf
Any other relevant information	https://www.saranathan.ac.in/IOAC/AOAR202 1/C7_2_1_ii.pdf

7.3 - Institutional Distinctiveness

7.3.1 - Portray the performance of the Institution in one area distinctive to its priority and thrust within 200 words

SARANATHAN COLLEGE OF ENGINEERING provides the best amenities required for students to enhance their Technical and Managerial skills, Academic activities thro' Online mode. The academic processes are providing certification courses to the students in enhancing their knowledge beyond academics. Staff is encouraged to develop their own projects that are funded by AICTE, DST and Government of India and received around 16 lakhs .Staff and Students are also focused on reputed journal and conference publications in this pandemic. The Placement cell has adopted an effective communication system to keep the students informed about potential job opportunities.

SCE encouraged and motivated the students to take online training by providing cash awards. Entrepreneurship is another major focus at Saranathan College of Engineering. The academic year 2020-21 experienced a severe pandemic during which the class room teaching was totally suspended and academic activity was disrupted. Google Suite came to our rescue with a slew of new features exclusively for teachers and students to ensure online teaching. Google Meet is seamlessly integrated with Google Classroom which enables us to administer online assignments to students, conduct periodical tests and organize quizzes for them. The online proceedings were recorded for monitoring and future reference.

File Description	Documents
Appropriate web in the Institutional website	<u>View File</u>
Any other relevant information	<u>View File</u>

7.3.2 - Plan of action for the next academic year

IQAC of Saranathan College of Engineering has identified the wide objectives which should be planned to attain during the next academic year, which are enumerated as follows:

- 1. The institution has planned to apply for Autonomous Status in the next academic year 2022.
- 2. All Six branches (CSE, ECE, EEE, ICE, IT, Mech) have been accredited by NBA and institution is planning to renew the same in the upcoming year
- 3. To Develop more ICT enabled class rooms with state- of-art facilities.
- 4. To establish the IPR cell to encourage and protect the intellectual property of the academic fraternity.
- 5. To promote and motivate the faculty members to undertake consultancy services for the betterment of our society.
- 6. To improve and measure the performance of students at continuous intervals through value addition courses for all UG and PG Courses.
- 7. The institution is planning for additional lab infrastructure so as to provide the best practical exposure.
- 8. Our College has planned to develop a quality infrastructure with additional buildings for the newly approved courses.
- 9. To improve the placement prospects in multi-national companies, the institution is planning to provide additional technical, coding and soft skill trainingalong with career guidance.