IQAC EXTERNAL PEER TEAM
REVIEW REPORT

Sengunthar Engineering College, Tiruchengode

(Autonomous)

(NAAC Accredited with "A" Grade)

(24.04.2021)

Report on

Performance of the Institution for the

Academic Year 2019 - 2020

by

External Peer Team of IQAC

SENGUNTHAR ENGINEERING COLLEGE
(AUTONOMOUS)
(Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai)
Recognized Under Section 2(f) & 12(B) of the UGC Act, 1956
NAAC Accredited with 'A' Grade
TIRUCHENGODE - 637 205 NAMAKKAL (Dt) TAMILNADU

ESTD 2001

JAS-ANZ
BSCIC
ISO 9001 REGISTERED

IQAC-EXTERNAL PEER TEAM REPORT ON PERFORMANCE OF THE COLLEGE FOR THE ACADEMIC YEAR 2019 – 2020

The External Peer review meeting for Internal Quality Assurance Cell (IQAC) was held on 24.04.2021 (Saturday), 11.00 a.m., at IQAC with the following members to assess the performance of the college.

Members of External Peer Team:

1. **Dr. R. Kumaravelan**	:	HoD/Mech & IQAC Co-Ordinator, Vellalar College of Engineering and Technology, Erode.
2. **Dr. S. Gokul**	:	HoD/EEE, Coimbatore Institute of Engineering and Technology, Coimbatore.

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Internal Members:

Dr. C. Venkatesh, Principal	Chairman
Dr. M. Selvakumar, HoD/Mech	IQAC Co-Ordinator
Dr. B. Sujatha, Dean (Academics)	Member
Dr. K.L. Palanisamy, HoD /S&H Cum Dean (Students Affairs)	Member
Dr. K. Umadevi, HoD /EEE Cum Dean (Planning and Development)	Member
Dr. P. Ramesh Kumar, Dean (R&D)	Member
Dr. M. Sakthivel, HoD/CSE	Member
Dr. C. Aarthi, HoD /ECE	Member
Dr. M. Seenirajan, HoD/Civil	Member
Prof. P. Jagadeeswaran, AP/Mech	IQAC Co-Coordinator

1.	**Name of the College**	:	Sengunthar Engineering College, (Autonomous) Kosavampalayam, Kumaramangalam (Po), Tiruchengodu, Namakkal Dist., Tamil Nadu -637205
2.	**Name of the Principal**	:	Dr. C. VENKATESH
3.	**Telephone/Fax /Email**	:	PhoneNo: 04288-255716 Mobile No: 98427-55552
4.	**Email**	:	info@scteng.co.in
5.	**Year of Establishment**	:	2001
6.	**Whether private or government or University maintained**	:	Private /Self Financing
7.	**Autonomous Status**	:	UGC Conferred Autonomous Status in the year 2019 for 10 years from 2019-2020 to 2028-2029.
8.	**Name of the Affiliating University**	:	Anna University, Chennai.

9. **Programmes Offered:**

UG Programmes:

S. No.	Name of the Programme	Sanctioned Intake
1	B.E. Civil Engineering	60
2	B.E. Computer Science and Engineering	90
3	B.E. Electronics and Communication Engineering	120
4	B.E. Electrical and Electronics Engineering	90
5	B.E. Mechanical Engineering	60

PG Programmes:

S. No.	Name of the Programme	Sanctioned Intake
1	M.E. Computer Science and Engineering	09
2	M.E. Structural Engineering	18
3	M.E. VLSI Design	18
4	Master of Business Administration	60

STUDENTS ON ROLL

Year of Study	B.E.	M.E.	M.B.A.	TOTAL
1st	65	10	04	79
2nd	160	5	17	182
3rd	217	-	-	217
4th	245	-	-	245
Total	687	15	21	723

FACULTY STRENGTH

Year of Study	Prof	ASP	AP	Total	No. of Ph.D. in the Dept.
Principal	1	-	-	1	1
Civil	1	1	22	24	2
CSE	1	2	17	20	4
ECE	1	1	20	22	2
EEE	1	2	15	18	1
MECH	-	2	11	13	1
M.B.A.	2	0	6	8	1
S&H	1	1	17	19	2
Total	8	9	108	125	14

END SEMESTER EXAMINATIONS (Nov/Dec 2019) RESULTS (Odd Semester)

Name of the Programme	Branch	No. of Students Appeared	No. of Students Passed	Pass %
B.E.	Civil	51	27	52.94
	CSE	175	114	65.14
	ECE	151	113	74.83
	EEE	143	93	65.03
	MECH	167	113	67.66
M.E.	CSE	1	0	0
	VLSI	1	1	100
	Structural Engineering	13	6	46.15
M.B.A.		21	8	38.10

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Sengunthar Engineering College was established with the ideal motto of "Education, Edification and Elevation", in the year 2001 underneath of Sengunthar Charitable Trust. It is located in 30.3 Acres of land in Tiruchengode, Namakkal Dist. Highway. This Co-educational, Self-financing Engineering College is approved by All India Council for Technical Education (AICTE), New Delhi and affiliated to Anna University, Chennai. It has been recognized by UGC, New Delhi under the Section 2(f) and 12(B) of the UGC Act, 1956 and also reaccredited with "A" Grade by NAAC (CGPA of 3.06) up to 31.12.2024. The college is Certified as ISO 9001:2015 Institution by BSCIC.

The College conferred and granted fresh Autonomous Status by UGC, New Delhi (Letter NO: F.22-1/2017(AC), Dated 24th June 2019) Anna University, Chennai (Letter No: 2504/AU/CAC/Autonomous/2019 Dated 02.07.2019) respectively from the period of 24th June 2019 to 23rd June 2029. As per the direction of UGC guidelines various Committees viz., Governing Body, Academic Council, BoS in all Departments, and Finance Committee were formed for smooth functioning.

The college has its own Management Information System (MIS) to manage General Administration, Autonomous System, Examinations, Students Attendance and Continuous Evaluation Process. The college has well marked administration setup in tune with the college Vision and Mission.

The involvement of leadership is achieved through well defined system and organizational structure consistent with norms of the AICTE and UGC. Faculty members and staff play a vital role in the academic and administrative activities of the college.

Sengunthar Engineering College received Two Gold Star Rating Certificate from MHRD - IIC (Institution's Innovation Council) on 22.06.2019. It has ranked as "AAA" in Top Engineering Colleges in India by CAREER 360° May 2020. Besides, attained 8th Position in Ranking of Promising Engineering Colleges in India and obtained 25th Rank at Top Engineering Colleges in Tamilnadu by GHRDC-CSR Engineering Colleges Survey 2019.

The College approved as the Remote Centre of Indian Institute of Technology, Bombay (IITB).

The Annual Quality Assurance Report (AQAR) for the year 2019-2020 was submitted to NAAC in December, 2020. The overall performance of the institution with respect to various quality aspects is satisfactory and appreciable.

The Internal Quality Assurance Cell (IQAC) of Sengunthar Engineering College was established in the year 2014. The IQAC plan to conduct various curricular, co-curricular, extra-curricular, extension activities and the implement of best practices to improve the academics and administrative performance of the institution.

From the date of inception, the IQAC is making continuous efforts to maintain quality education as well as taken up various quality initiatives for the overall development of the college.

The Chairman of the IQAC welcomed the external review members and internal IQAC members; pointed out about the bench mark that has been formulated for the enhancement of the quality of the institution.

The committee verified and noted the following key parameters with respect to the performance of the institution:

i.	Curricular Aspects
ii.	Teaching- Learning and Evaluation
iii.	Research, Innovations and Extension
iv.	Infrastructure and Learning Resources
v.	Student Support and Progression
vi.	Governance, Leadership and Management
vii.	Institutional Values and Best Practices

I. CURRICULAR ASPECTS

- The first meeting was conducted for the academic year 2019-2020 of the newly constituted Academic Council, Board of Studies for all the departments and Finance Committee under Autonomy.

- In all UG programmes for the benefit of students with respect to Employability/ Entrepreneurship/Skill Development/ Value Added Courses and Life Skills have introduced in the new Autonomous Regulations - 2019.

S. No	Criterion	Rating		
		Very good	Good	Satisfactory
1	Quality of vision and mission statements	√		
2	Implementation of choice-based credit system (CBCS)		√	
3	Adequacy of courses having focus on employability/entrepreneurship/skill development		√	
4	Evidence of procedures for framing POs, PSOs and their adequacy			√

5	Evidence of attainment of POs, PSOs against set targets			√
6	Evidence for framing of COs and their attainment against set targets			√
7	Evidence for structured feedback system		√	
8	Quality of IAT and ESE question papers	√		
9	Preparation and adherence to academic Calendar by the institution	√		
10	Implementation of Examination reforms		√	

II. TEACHING - LEARNING AND EVALUATION

- The institution strictly follows the academic calendar prepared at the beginning of the academic year without any deviation.
- Effective teaching pedagogy is used in all subjects with an outcome-based approach.
- Academic audit is conducted every fortnight by the respective Head of the Departments to monitor the concurrence of the teaching process with the proposed lesson plan.
- Feedback mechanism is adopted to review the teaching delivery process.
- Result Analysis is prepared after every Internal Assessment Test to assess the overall performance of the students.
- Our Institution has an effective Mentor Ward System, which shows a gradual development among the students' performance in all aspects. Each faculty is assigned with 15 students as their ward and they give personal attention and care among the students for their career and personal development in all aspects.
- A regular review meeting would give them benefit in educational, personal, professional and other improvements. Apart from the Mentor Ward System, Dean (Students Affairs) is taking care of the Critical issues among the students to overcome out of it. Regular Counselling session is organized by batch wise for their upliftment.
- Student Satisfaction Survey (SSS) on overall institutional performance (Institution may design the questionnaire) (results and details be provided as weblink)

ENGAGEMENT OF STUDENT'S DURING COVID-19 LOCKDOWN:

- During the pandemic situation the pending syllabus for all semesters of UG & PG programmes for the academic year 2019-2020 was completed by online mode.
- Examinations (Apr/May 2020) & Projects for the final year students were conducted through Online (Google Meet) mode, as per the guidelines of the Anna

University. The End Semesters Examinations for the academic year 2019-2020 were also conducted online.

- The institution utilized the lockdown period effectively by engaging both the faculty and students for their value addition through "SWAYAM-NPTEL" online mode and 421 (Students/Faculty) were benefitted.

S. No	Criterion	Rating		
		Very good	**Good**	**Satisfactory**
1	Faculty : Student Ratio	√		
2	Students' progression without backlog in any semester		√	
3	Students completing the programs in the stipulated time		√	
4	Number of students placed and their median salary		√	
5	Number of students clearing NET/UPSC/CAT/GATE/GRE/IES Exams			√
6	Adequacy of guest/technical lectures arranged for students		√	
7	Adequacy of industrial visits arranged for students		√	
8	Relevance of one credit courses			√
9	Evidence for students completing NPTEL courses			√
10	Student mentoring system		√	
11	Scholarship / Financial aid to students	√		
12	Activities and support from the Alumni Association		√	
13	Performance in sports activities		√	
14	Placement services provided to students		√	
15	Learning Through Entrepreneurship Cell		√	
16	Learning beyond class room			√
17	Student Council & representation of students on academic & administrative bodies / committees of the institution		√	
18	Adequacy of workshops conducted on Entrepreneurship/IPR/Innovative practices		√	
19	Student exchange programs/ activities			√

III. RESEARCH, INNOVATION S AND EXTENSION

- All the students are motivated to carry out minor research projects and mini projects in symposiums every year.
- All the faculty members are encouraged to pursue Ph.D. under their domain.
- The "Centre for Excellence" in association with M/s. ABE Semiconductor Designs, Chennai in the ECE Department established by the College for focusing on market driven needs.
- The College has nominated as a Nodal National Resource Centre for Namakkal District by National Cyber Safety and Security Standards of India.
- There are 2 faculty members were completed their Ph.D. during the academic year 2019-2020.
- Two proposals (ECE, MECH) submitted for Science and Engineering Research Board (SERB) for the worth of Rs.1,00,14,972/ (ECE Rs.50,14,972 / MECH Rs.50,00,000/)
- Fund Received for STTP – Short Term Training Program form AQIS Scheme for the worth of Rs. 3,00,000.
- Submitted the Proposal for TNSCST Scheme under the Department (CSE, ECE, EEE MECH) worth of Rs. 61,03,960/
- Submitted the Proposal for MSME Scheme under the Department (Civil, CSE, ECE, EEE MECH) worth of Rs. 2,37,00,000/
- Submitted the Proposal for My Gov Scheme under the Department (Civil, CSE, ECE, EEE MECH) worth of Rs. 1,94,00,000/
- Submitted the Proposal for AICTE/FDP/STTP Scheme under the Department (CSE, ECE, EEE MECH) worth of Rs. 90,81,347/
- Submitted the Proposal for ICSSR/IMPRESS Scheme under the Department (ECE) worth of Rs. 5,00,000/
- Entrepreneurship Development Institute of India, (EDII) Ahmadabad sponsored Rs.0.20 Lakhs to conduct "Entrepreneurship Awareness Camp" from 18th to 20th December 2019. Organized Sengunthar Entrepreneur Exhibition 4th Edition on 18th to 20th December 2019. During this expo the total Business was Rs. 34,515.
- AICTE Sanctioned Rs. 19,18,750/ for CSE, ECE, EEE Mechanical Departments under the Skills Training Scheme from Pradhan Mantri Kaushal Vikas Yojana (PMKVYTI).
- MSME Expert Committee visited and inspected on 21.01.2020.

- TNSCST Sanctioned Rs. 7500/ for one project on February 2019.
- Institution had 13 MoUs with institutions of National, other institutions, Industries, Corporate houses during the academic year 2019-2020.
- Organized Third International Conference "NexGen" on 20 &21 March 2020.
- The IQAC is proposed to review the faculty who are pursuing their Ph.D along with new Ph.D registrations. In addition, the publications are also the review for the improvement of the quality. There were 51 Research Publications in the UGC listed, 41 papers published as Book Chapters in edited Volumes/Books published, and papers in National/International Conference Proceedings.
- 02 Patents are filed during the year 2019-2020.
- Institution Innovation Council (IIC) is established under the MHRD's Innovation Cell and college achieved Two Gold Star Rating Certificate for the activities organized with respect to Innovations, IPRs, Startups and Entrepreneurship.

S. No	Criterion	Rating		
		Very Good	Good	Satisfactory
1	Faculty profile and the adequacy of Faculty members as per the norms of AICTE		√	
2	Faculty members recognized as research guides			√
3	Faculty members with PhD from universities other than Tamil Nadu and abroad			√
4	Quality of Faculty Publications		√	
5	Quality of research projects			√
6	Evidence for research grants received from various agencies			√
7	Evidence for consultancy activities			√
8	Evidence for patents / published/ awarded		√	
9	Adequacy of faculty training programs (FDP/STTP)			√
10	Adequacy of number of conferences and workshops attended by the faculty members	√		
11	Adequacy of number of workshops /FDPs/STTPs/Conferences conducted by the department			√

12	Provision of seed money to teachers for research			√
13	Revenue generated from corporate training by the institution			√
14	Training programs for new faculty members			√
15	Awards for faculty members			√

IV. INFRASTRUCTURE AND LEARNING RESOURCES

- The college is keen to create state-of-art infrastructure that also satisfies the standards and norms of AICTE and maintained by Dean (Planning and Development). It has a policy for creation and enhancement of infrastructure.

- Our Institution has 33 labs with adequate equipment and components.

- Sengunthar Engineering College has a unique Central Library.

- The College has a Central Library of 1527 sq. mts., with a two storey building, well equipped with 37,856 Books and IEEE online journals subscription along with hard copies. The Library provides 12 News Papers to the students in order to update the day-to-day news. The College events, circulars, placement news and other important events of the society are displayed on the Electronics Notice Board (LCD Monitor) in the entrance of Central Library.

- It has separate Digital Library Centre which has 60 computers with internet facility and 100 Mbps broadband connectivity.

- Network/Resource Sharing facilities such as DELNET and NPTEL are also available. The sections of Library which includes Technical Section, Lending Book Section, Reference Section, Book-Bank Section, Periodicals Section, Back Volume Section, Audio-Video Section, Reprography Section, Competitive Exam Section, Group Discussion Section, Digital Library Section, Circulation Counter, Stack Book Section and New Arrival Section to help the readers.

- The College also flaunts an expansive Outdoor Playground that comprises of 400 meter Standard Track, a separate field/court, available for various outdoor games i.e., Foot Ball Field, Volley Ball Court, Kabaddi Court, Cricket Ground, Ball Badminton Court, Basket Ball Court (Concrete), Badminton Court and a separate field/court available for Table Tennis, Physical Fitness and Weight Training, Carrom, Boxing for Indoor Games, a separate store room and a facility to accommodate a total of 1700 students (1100 boys and 600 girls) in the hostel (separately for boys and girls).

S. No	Criterion	Rating		
		Very good	Good	Satisfactory
1	Evidence for use of ICT in teaching learning process			√
2	Adequacy of facilities for teaching - learning.viz., classrooms, laboratories	√		
3	Adequacy of modern equipment in the laboratories		√	
4	Adequacy of facilities for sports and cultural activities		√	
5	Improvements in the library services		√	
6	Adequacy of books and journals available in library		√	
7	Computerization of administration and the process of admissions and examination results, issue of certificates		√	
8	Computer and internet access and training to teachers, non-teaching staff and students		√	
9	Number of start-ups incubated on campus			√

V. STUDENT SUPPORT AND PROGRESSION

- Sengunthar Charitable Trust financially supported to 93 meritorious poor students by sponsoring the amount Rs. 16,95,000 during the academic year 2019-2020.

- Through Central Sector Scholarship Scheme and Minority Scholarship there were 44 students benefited worth of Rs. 4,40,000 on a means cum merit basis.

- Sengunthar Charitable Trust has kind support to the deserved students who are excel in excellence of Curricular, Co-curricular and Extra-curricular activities. Every year the deserved students are awarded with certificates and cash by the Trust on the eve of Annual Day Celebration.

- The University First Rank Holders are honored with Gold Medal and Cash Award of Rs.5000/- every year.

- University Second Rank Holders are appreciated with Silver Medal and Cash Award of Rs.3000/- every year.

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- University Rank Holders are recognized with Medal and Merit Certificate for their achievement.
- Students those who are Securing First Rank in their discipline are highly regarded with cash prize of Rs.1500/- and a Merit Certificate; Second Rank Holders are appreciated with cash prize of Rs. 1000/- and Merit Certificate and Third Rank Holders are encouraged with cash prize of Rs.500/- and Merit Certificate.
- Students those who are Securing 100% Attendance are revered with Cash Prize of Rs.500/- each along with Merit Certificate.
- The best achiever in Curricular, Co-curricular and Extra-curricular activities has chosen among all the outgoing students and awards him/her with a certificate as "Best Outgoing Student" of the year along with a shield and a Gold Medal which is in the name of "VIT Kalvi Ko G.Viswanathan Chancellor Award".
- The best performing students' team in cultural activities during Annual Day function is awarded with a Cash Prize of Rs.3000/-
- Students winning cash awards in Curricular, Co-curricular and Extra-curricular Activities conducted in other colleges are awarded with equal cash awards.
- Every year the students who win and participate in the Sports activities in and out of the campus are honored with various cash prizes, awards and shields during the Sports Day Celebration.
- The college has the distinction of being one of the best in terms of its Sports achievements and has carved a niche for itself in the sports.14 Gold Medals, 6 Silver Medals, 8 Bronze Metals were won by the students during the academic year 2019-2020.
- Under Mentoring System: (Tutor Ward Meeting) all the students were monitored by the faculty members through various schemes such as Personal Counselling, Students Induction Programme and Remedial Coaching for Slow Learners and there were 10 students, 150 students and 120 students respectively benefitted.
- Under career counselling scheme there were 60 students benefitted in competitive examinations, 150 members students benefitted by career counselling activities, 2 numbers of students were cleared in the competitive examinations.

S. No	Criterion	Rating		
		Very good	Good	Satisfactory
1	Students participations in IIT's, NIT's, Govt Institutions and private Institutions.		√	
2	Prize achievements in various events.		√	
3	Participants in social awareness activities.		√	
4	Scholarships and financial supports	√		
5	Institutional mechanism for transparency, timely redressal of students grievances, presentation of sexual harassment and ragging causes.	√		
6	Student progression to higher education.			√
7	No of awards /medals for outstanding performance in sports /cultural activities at national and international levels		√	
8	Role of alumni in college development			√

VI. GOVERNANCE, LEADERSHIP AND MANAGEMENT

- Many initiatives and innovative practices of the Correspondent and the Principal play a vital role in the excellent governance of the institution. This has been the most important factor in the effective utilization of autonomy

- The College has a benevolent and supportive management.

- Prof.A.Baladhandapani, Secretary and Correspondent has awarded as Mahatma Gandhi leadership award by NRI welfare society of India at House of commons , London, U.K on 11.10.2019.

- Dr.C.Venkatesh, Principal was a recipient of National Educational Awards 2019 by Beginup Research Intelligence Private Limited, Bangalore.

- The institution is effectively implementing various areas of operations such as Planning and Development, Administration, Finance & Accounts, Student Admission & Support and Examination through IQAC.

S. No	Criterion	Rating		
		Very good	Good	Satisfactory
1	Functioning of academic bodies as per UGC guidelines (Governing Body, Academic Council, Finance Committee and Board of Studies etc.)	√		
2	Evidence of Minutes of the Boards of Studies/ Academic Council meetings etc.	√		
3	Functioning of IQAC		√	
4	Implementation of ISO	√		
5	Institution has Performance Appraisal System for faculty members	√		

VII. INSTITUTIONAL VALUES AND BEST PRACTICES

- A series of lectures are organized periodically for the students to instil moral and ethical values.
- Appreciated and encouraged the students by awarding cash prize for the winners of the symposiums, conferences and workshops.

S. No	Criterion	Rating		
		Very good	Good	Satisfactory
1	Adequacy of MoUs signed with institutions /industries		√	
2	Adequacy of Gender equity promotion programs organized by the institution	√		
3	Annual power requirement of the institution met by the renewable energy sources			√
4	Waste Management			√
5	Rain water harvesting structures and utilization in the campus	√		
6	Green Practices	√		
7	Differently abled Friendliness Resources in the institution		√	
8	Industry Institute interaction		√	
9	Institutional best practices		√	

CONCLUDING REMARKS

- Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing the quality assurance strategies and polices.
- The Institution reviews its teaching learning process structures, methodologies of operation and learning outcomes through IQAC setup as per norms.

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- The committee appreciates the well-maintained academic records/course files, Infrastructure facilities, student's involvement in various co-curricular and extra-curricular activities.

SUGGESTIONS FOR IMPROVEMENT

- Mission statements to be reviewed and reframed periodically based on attained targets and latest developments.
- Course Outcomes (CO) to be prepared based on the depth of the course and not to be based on the units.
- Assessment criteria for POs shall be framed based on AICTE examination reforms.
- Development of e-content modules for the Academic Courses.
- Increase in number of Value-Added Courses.
- Institutional best practices to be refined.
- Identify and conduct more remedial classes for weak students in analytical subjects which in turn improves placement also.
- More attention is required in faculty research activities for the publication in High indexed Journals.
- Faculty attention is very much needed in funded research projects.

The committee appreciates and thanks the members of IQAC.

The committee observed and satisfied the considerable improvement in all the key performance indicators measured by National Bodies.

Dr. R. Kumaravelan
Head (Mech) & IQAC Co-Ordinator,
Vellalar College of Engineering and Technology,
Erode.

Dr. S. Gokul
Head (EEE),
Coimbatore Institute of Engineering and Technology,
Coimbatore.

Dr. C. Venkatesh
Principal cum Chairman IQAC,
Sengunthar Engineering College,
Tiruchengode.