Sri Sivasubramaniya Nadar College of Engineering (Autonomous)

Old Mahabalipuram Road, Kalavakkam -603110

IQAC -External Audit

Date of the Audit: 03.11.2023

List of External Auditors

S.No	Name	Designation	Institution	Department Assigned
1	Capt. Dr. A. Suresh Babu	Professor	Department of Manufacturing Engineering, College of Engineering, Guindy	Mechanical Engineering
2	Dr. Kaviyarasu A	Assistant professor	Deputy Director IQAC Department of Aerospace Engineering MIT, Chromepet,	MBA Department
3	Dr. Rajesh Kanna B	Associate Professor & HoD	Rajiv Gandhi National Institute of Youth Development (RGNIYD), Sriperumbudur	Computer Science Engineering
4	Dr. M. Latha Kumari	Assistant Professor	ETHIRAJ COLLEGE FOR WOMEN 70, Ethiraj Salai, Chennai.	Humanities and Sciences
5	Dr. V. Prasanna Kumari	Professor	IQAC Coordinator, Rajalakshmi Engineering College, Tandalam, Chennai	Information Technology
6	Dr P.Prakash	Professor	Department of Electronics and Communication Engineering MIT, Chromepet, Chennai	Bio-Medical Engineering
7	Dr.Nakeeran	Professor	School of Electronics and Technology, Pondicherry University	Electrical and Electronics Engineering
8	Dr. Manoj kumar Rajagopal	Professor	Vellore Institute of Technology, Chennai	Electronics and Communication Engineering
9	Dr. R M Hariharan	Assistant Professor	Department of Physics and Nanotechnology, SRM University, Kattankulathur - Chennai	Chemical Engineering
10	Dr. S. Gopinath	Professor	Department of Mechanical Engineering, Sri Venkateswara College of Engineering, Chennai	Civil Engineering

Dr. N. VENKATESWARAN, Ph.D.
Professor — Co-ordinator IQAC
Department of Biomedical Engineering
SSN College of Engineering
Rajiv Gandhi Salai (OMR)
Kalavakkam, Tamilnadu, India - 603 110

SRI SIVASUBRAMANIYA NADAR COLLEGE OF ENGINEERING
Rajiv Gandhi Salai (OMR), Kalavakkam – 603 110, TN, India
NAAC Academic Audit
Date: 03.11.2023

IQAC - External Audit

SCHEDULE

Time	Activity	In charge
08:30am – 09:00am	Receiving the Expert members and Breakfast	IQAC Coordinator
09:00am – 09:20am	Meeting with Principal/ Vice Principal Conference Hall (Admin Block)	IQAC Coordinator
09:20am – 09:30am	To reach to the respective departments	Dept. IQAC Coordinator
09:30am – 09:45am	Meeting with the department team	HoD and team
09:45am – 10:15am	Department Lab Visits	Respective Lab In-charges
10:15am – 10:30am	Tea break	
10:30am – 12:15 pm	Department Files verification	Dept. IQAC Coordinator
12:15pm - 01:15pm	Lunch	
01:15pm - 02:15pm	Department Files verification (Cont..)	Dept. IQAC Coordinator
02:15pm - 02:30pm	Report Preparation	Expert Member
02:30pm - 02:45pm	Feedback of the department - Meeting with HoD and Faculty	HoD, All Staff members
02:45pm - 03:30pm	Exit feedback	IQAC Coordinator

Prepared by

Co-ordinator - IQAC

Sri Sivasubramaniya Nadar College of Engineering, Kalavakkam - 603110

Academic Audit Form   -   2022 -2023

Department Information

Name of the Department		
No. of Full-time permanent Faculty		
Academic Programmes in the Department	UG	
	PG	
	PhD	
Student Strength Program wise	UG	
	PG	
No. of PhD Students	FT	
	PT	
Name, designation, and affiliation of the External Expert		
Signature of the External Expert		

- The External Expert can grade each parameter with points 0,1,2,3,4 based on assessment.

- Wherever applicable, ratings may be based on the data available for the last academic years.

Ratings (4 - Excellent, 3 – Very Good, 2 - Good, 1 - Average, 0 - Not Satisfactory)

Criterion 1: Curricular Aspects							
Sl. No.	Scope of Audit	Dept Data	Rating				
			4	3	2	1	0
1.1 Curriculum Design and Development							
1.1.1	Curricula is relevant to the local / national / regional / global developmental needs						
1.1.2	Adequacy / frequency of syllabus revision carried out						
1.1.3	Number of courses that focus on employability / entrepreneurship / skill development to the total number of courses						
1.2 Academic Flexibility							
1.2.1	Number of new courses introduced to the total number of courses						
1.2.2	Implementation of CBCS / elective courses in all the programs offered in the department						
1.3 Curriculum Enrichment							
1.3.1	Percentage of Courses relevant to Gender, Environment and Sustainability, Human Values and Professional Ethics in the Curriculum						
1.3.2	Number of value-added courses conducted during the year						
	Number of NPTEL-SWAYAM courses students have enrolled and successfully completed						
1.3.3	Percentage of Student enrolment in the value-added courses and NPTEL-SWAYAM courses						
1.3.4	Percentage of students undertaking field projects						
	Percentage of students undertaking internships						
1.4 Feedback System							
1.4.1	System of feedback from 1) Students, 2) Teachers, 3) Employers, 4) Alumni 5) Parents, for design and review of syllabus						
1.4.2	System of feedback collection and action taken						
Criterion 2: Teaching- Learning and Evaluation							
2.1 Student Enrolment and Profile							
2.1.1	Percentage of students from other States in all the programs						
2.1.2	Ratio of students to mentors						
2.1.3	Student - Full time teacher ratio						
2.2 Catering to Student Diversity							
2.2.1	Number of special programs organized for advanced learners						
	Number of special programs (Remedial / Bridge courses) organized for slow learners						

Ratings (4 - Excellent, 3 – Very Good, 2 - Good, 1 - Average, 0 - Not Satisfactory)

Sl. No.	Scope of Audit	Dept Data	Rating 4	3	2	1	0
2.2.2	Evidence of mentoring process to ensure motivation of slow learners						
2.2.3	Percentage of differently abled students (Divyangjan) on roll.						
2.3 Teaching-Learning Process							
2.3.1	Course files and Teaching plans are available with faculty members						
2.3.2	Use of Learning Management Systems (LMS) and e-resources (Lecture Notes/ PPTs etc.)						
2.4 Teacher Profile and Quality							
2.4.1	Percentage of full-time faculty against sanctioned posts						
2.4.2	Percentage of full-time faculty with Ph.D.						
2.4.3	Average teaching experience of full-time teachers (in years)						
2.4.4	Percentage of teachers received awards, recognition, fellowships at State, National, International level						
2.4.5	Percentage of full-time teachers from other States in the department						
2.5 Evaluation Process and Reforms							
2.5.1	Question Paper explores all the elements of Blooms Taxonomy						
2.5.2	Evaluation process is in accordance with the course objectives.						
2.5.3	Percentage of student grievances (revaluation applied) about evaluation						
2.5.4	Integration of IT in the Examination process						
2.6 Student Performance and Learning Outcomes							
2.6.1	POs, PSOs and COs for all Programs offered by the department are stated and displayed, communicated to teachers and students						
2.6.2	CO-PO attainment is computed for the 2022-2023 passed out Batch and the gap analysis is performed for the courses of the department						
2.6.3	Involvement of students in the learning/training initiatives by Government and corporate bodies.						
2.6.4	Pass percentage of students completed the program in 2022-2023						

Sl. No.	Scope of Audit	Dept Data	Rating				
			4	3	2	1	0
2.7 Student satisfaction Survey							
2.7.1	Assessment of the student satisfaction survey on teaching learning process.						
Criterion 3: Research, Innovations and Extension							
3.1 Promotion of Research and Facilities							
3.1.1	Policy for promotion of research in the department						
3.1.2	Faculty received SSN internal seed funding for research during the year						
3.1.3	Number of teachers awarded international fellowship for advanced studies/research during the year						
3.1.4	Assessment on the availability of Central facilities within the department for research.						
3.2 Resource Mobilization for Research							
3.2.1	Number of teachers having sponsored research projects						
3.2.2	Total Grants received through research projects sponsored by the government and non-government sources (in Lakhs INR)						
3.2.3	Percentage of teachers recognized as research guides						
3.3 Innovation Ecosystem							
3.3.1	Assessment on the Participation of the department in the innovations and Incubation centers of the institution.						
3.3.2	Number of Workshops/ seminars conducted on Intellectual Property Rights (IPR) and Industry - Academia Innovative practices.						
3.3.3	Number of awards for innovation/research won by teachers/ research scholars/students during the year.						
3.3.4	Number of start-ups incubated on campus from the department.						
3.4 Research Publications and Awards							
3.4.1	Average number of Research Scholars per Research Guide in the Department						
3.4.2	Number of research papers published per faculty in WOS/Scopus Journals						
3.4.3	Number of books and chapters in edited volumes published						
3.4.4	Bibliometrics of the publications during the last five years based on average citation index in Web of Science / Scopus						

Sl. No.	Scope of Audit	Dept Data	Rating				
			4	3	2	1	0
3.4.5	Total number of Ph.Ds awarded during the year						
3.4.6	Number of Patents/copyright published/awarded						
3.5 Consultancy							
3.5.1	Revenue generated from consultancy and corporate training (in Lakhs INR)						
3.5.2	Total value of revenue shared to the faculty during the year by way of consultancy activities by faculty.						
3.5.3	Assessment on the efforts of the department to publicize the available expertise for consultancy						
3.6 Extension Activities							
3.6.1	Number of students participated in the extension activities of neighborhood community						
3.6.2	Number of students participated in outreach programs such as Swachh Bharat etc., in collaboration with industry and NGOs through NSS/NCC/Red cross/YRC etc.						
3.6.3	Number of courses integrated with outreach activity (Sensitizing students to social issues)						
3.7 Collaboration							
3.7.1	Number of Collaborative activities (research, faculty exchange, Student exchange)						
3.7.2	Number of industry link (for internship, on the- job training, project work, sharing of research facilities etc.)						
3.7.3	Number of MoUs with other Institutions, industries, corporate houses etc. during the year						
Criterion 4: Infrastructure and Learning Resources							
4.1 Physical Facilities							
4.1.1	Assessment on the adequacy of department facilities for teaching – learning, (classrooms, laboratories, computing equipment, etc.)						
4.1.2	Assessment on promotion of cultural activities and yoga in the department						
4.1.3	Adequacy of classrooms and seminar halls with ICT – enabled facilities such as smart class, LMS, etc.						
4.1.4	Percentage of Department Budget allocation for infrastructure augmentation.						
4.2 Library as a Learning Resource							
4.2.1	Availability of remote access to e-resources of the library						

Sl. No.	Scope of Audit	Dept Data	Rating				
			4	3	2	1	0
4.3 IT Infrastructure							
4.3.1	Frequency of updates of IT facilities including Wi-Fi						
4.3.2	Student - Computer ratio in the department						
4.3.3	Adequacy of bandwidth available of internet connection						
4.3.4	Assessment on facilities for e-content development						
Criterion 5: Student Support and Progression							
5.1 Student Support							
5.1.1	Percentage of students benefited by scholarships provided by the institution						
5.1.2	Number of programs organized for students such as Guidance for competitive examinations, Career Counselling, etc.,						
5.1.3	Percentage of students benefited by Guidance for competitive examinations, Career Counselling, etc.,						
5.2 Student Progression							
5.2.1	Percentage of placement of the outgoing Batch (2019 - 2023)						
5.2.2	Percentage of student progression to higher education and as entrepreneurs (2019 – 2023 Batch)						
5.2.3	Number of Students qualifying in state/ national/ international level examinations during last year						
5.2.4	Number of students as members of Professional societies/chapters						
5.3 Student Participation and Activities							
5.3.1	Number of awards/medals received by students for outstanding performance in sports/cultural activities at national/international level						
5.3.2	Evidence of the presence of an active Student Council & representation of students on academic & administrative committees						
5.4 Alumni Engagement							
5.4.1	Number of Alumni invited for presentations (knowledge sharing, Department activities etc.)						
5.4.2	Number of Alumni participated in the alumni Association meetings held						
	Alumni financial contribution (in Lakhs INR)						

Ratings (4 - Excellent, 3 – Very Good, 2 - Good, 1 - Average, 0 - Not Satisfactory)

Overall Assessment

Strengths of the Department

Weaknesses of the Department

Best practices followed by the Department.

Overall Report and Recommendations for Improvement

Signature of the External Expert

Ratings (4 - Excellent, 3 – Very Good, 2 - Good, 1 - Average, 0 - Not Satisfactory)

M.No	Scope of Audit	4	3	2	1
Criterion 1: Curricular Aspects					
1.1 Curriculum Design and Development					
1.1.1	Curricula is relevant to the local / national / regional / global developmental needs	Qualitative Assessment			
1.1.2	Adequacy / frequency of syllabus revision carried out	Score = No. of revisions per programme in the last five years			
1.1.3	Number of courses that focus on employability / entrepreneurship / skill development to the total number of courses	>30%	20 to 30%	10 to 20%	5 to 10%
1.2 Academic Flexibility					
1.2.1	Percentage of new courses introduced to the total number of courses	>20% -	15 to 20%	10 to 15%	5 to 10%
1.2.2	Implementation of CBCS / elective courses in all the programs offered in the department	Qualitative Assessment			
1.3 Curriculum Enrichment					
1.3.1	Percentage of Courses relevant to Gender, Environment and Sustainability, Human Values and Professional Ethics in the Curriculum	>15%	10 to 15%	5 to 10%	1 to 5%
1.3.2	Number of value-added courses conducted during the year	Score = 2 * No. of Value-Added Courses of at least 30 contact hours conducted			
	Number of NPTEL-SWAYAM courses students have enrolled and successfully completed	>10	7 to 10	5 to 7	1 to 5
1.3.3	Percentage of Students enrolment in the value-added courses and NPTEL-SWAYAM courses	>40%	30 to 40%	20 to 30%	10 to 20%
1.3.4	Percentage of students undertaking field projects	>20%	15 to 20%	10 to 15%	5 to 10%
	Percentage of students undertaking internships	>60%	40 to 60%	20 to 40%	1 to 20%
1.4 Feedback System					
1.4.1	System of feedback from 1) Students, 2) Teachers, 3) Employers, 4) Alumni 5) Parents, for design and review of syllabus	Score = No. of stakeholders from whom feedback is collected			
1.4.2	System of feedback collection and action taken	Feedback collected – 1 "& analysed – 2 "& action taken – 3 "& implemented in curriculum design - 4			
Criterion 2: Teaching- Learning and Evaluation					
2.1 Student Enrolment and Profile					
2.1.1	Percentage of students from other States in all the programs	>15%	10 to 15%	5 to 10 %	1 to 5%
2.1.2	Ratio of students to mentors	20:1 - 4	30:1 - 3	50:1 - 2	60:1 - 1
2.1.3	Student - Full time teacher ratio	15:1 - 4	20:1 - 3	25:1 - 2	30:1 - 1
2.2 Catering to Student Diversity					
2.2.1	Number of special programs organized for advanced learners	Qualitative Assessment			
	Number of special programs (Remedial / Bridge courses) organized for slow learners	Qualitative Assessment			
2.2.2	Evidence of mentoring process to ensure motivation of slow learners	Qualitative Assessment			
2.2.3	Percentage of differently abled students (Divyangjan) on roll.	>5 %	< 5 %	-	-
2.3 Teaching-Learning Process					
2.3.1	Course files and Teaching plans are available with faculty members	Qualitative Assessment			
2.3.2	Use of Learning Management Systems (LMS) and e-resources (Lecture Notes/ PPTs etc.)	Qualitative Assessment			
2.4 Teacher Profile and Quality					
2.4.1	Percentage of full-time faculty against sanctioned posts	>=90%	80 to 89%	70 to 79%	50 to 69%
2.4.2	Percentage of full-time faculty with Ph.D.	>=70%	60 to 69%	50 to 59%	40 to 49 %
2.4.3	Average teaching sixperience of full-time teachers (in years)	>=15	12 to 15	9 to 12	6 to 9
2.4.4	Percentage of teachers received awards, recognition, fellowships at State, National, International level	>15%	10 to 15%	5 to 10 %	1 to 5%
2.4.5	Percentage of full-time teachers from other States in the department	>15%	10 to 15%	5 to 10 %	1 to 5%
2.5 Evaluation Process and Reforms					
2.5.1	Question Paper explores all the elements of Blooms Taxonomy	Qualitative Assessment			
2.5.2	Evaluation process is in accordance with the course objectives.	Qualitative Assessment			

M.No	Scope of Audit	4	3	2	1
2.5.3	Percentage of student grievances (revaluation applied) about evaluation	< 1%	1 to 5 %	5 to 10 %	10 to 15 %
2.5.4	Integration of IT in the Examination process	Qualitative Assessment			
2.6 Student Performance and Learning Outcomes					
2.6.1	POs, PSOs and COs for all Programs offered by the department are stated and displayed, communicated to teachers and students	Qualitative Assessment			
2.6.2	CO-PO attainment is computed for the 2022-2023 passed out Batch and the gap analysis is performed for the courses of the department	Qualitative Assessment			
2.6.3	Involvement of students in the learning/training initiatives by Government and corporate bodies.	Qualitative Assessment			
2.6.4	Pass percentage of students completed the program in 2022- 2023	>= 90%	80 to 89%	70 to 79%	60 to 69%
2.7 Student satisfaction Survey					
2.7.1	Assessment of the student satisfaction survey on teaching learning process.	Qualitative Assessment			
Criterion 3: Research, Innovations and Extension					
3.1 Promotion of Research and Facilities					
3.1.1	Policy for promotion of research in the department	Qualitative Assessment			
3.1.2	Faculty received SSN internal seed funding (in lakhs) for research during the year	>20 Lakhs	10 to 20 lakhs	5 to 10 lakhs	1 to 5 lakhs
3.1.3	Number of teachers awarded international fellowship for advanced studies/research during the year	>=5%	4 to 5%	2 to 4 %	0 to 2%
3.1.4	Assessment on the availability of Central facilities within the department for research.	Qualitative Assessment			
3.2 Resource Mobilization for Research					
3.2.1	Number of teachers having sponsored research projects	>= 30%	20 to 30%	10 to 20 %	5 to 10%
3.2.2	Total Grants received through research projects sponsored by the government and non-government sources (in Lakhs INR)	>50 Lakhs	40 to 50 lakhs	20 to 40 lakhs	10 to 20 lakhs
3.2.3	Percentage of teachers recognized as research guides	>= 80%	60 to 80%	40 to 60 %	20 to 40%
3.3 Innovation Ecosystem					
3.3.1	Assessment on the Participation of the department in the innovations and Incubation centers of the institution.	Qualitative Assessment			
3.3.2	Number of Workshops/ seminars conducted on Intellectual Property Rights (IPR) and Industry - Academia Innovative practices.	>10	8 to 10	6 & 8	4 & 6
3.3.3	Number of awards for innovation/research won by teachers/ research scholars/students during the year.	>5	4 & 5	2 & 3	1 & 2
3.3.4	Number of start-ups incubated on campus from the department.	>5	4 & 5	2 & 3	1 & 2
3.4 Research Publications and Awards					
3.4.1	Average number of Research Scholars per Research Guide in the Department	>= 6	4 & 5	2 & 3	1 & 2
3.4.2	Number of research papers published per faculty in WOS/Scopus Journals	>= 6	4 & 5	2 & 3	1 & 2
3.4.3	Number of books and chapters in edited volumes published	>=4	3	2	1
3.4.4	Bibliometrics of the publications during the last five years based on average citation index in Scopus / Bibliometrics of the publications during the last five years based on average citation index in Web of Science	Average >=8	Average 6-8	Average 3-6	Average 1-3
3.4.5	Total number of Ph.Ds awarded during the year	>3	3	2	1
3.4.6	Number of Patents/copyright published/awarded	>3	3	2	1
3.5 Consultancy					
3.5.1	Revenue generated from consultancy and corporate training (in Lakhs INR)	>10	8 to 10	6 to 8	2 to 6
3.5.2	Total value of revenue shared to the faculty during the year by way of consultancy activities by faculty. (in Lakhs INR)	>3	2 to 3	1 to 2	<1
3.5.3	Assessment on the efforts of the department to publicize the available expertise for consultancy	Qualitative Assessment			
3.6 Extension Activities					
3.6.1	Number of students participated in the extension activities of neighborhood community	>20%	15 to 20%	10 to 15%	5 to 10%

M.No	Scope of Audit	4	3	2	1
3.6.2	Number of students participated in outreach programs such as Swachh Bharat etc., in collaboration with industry and NGOs through NSS/NCC/Red cross/YRC etc.	>20%	15 to 20%	10 to 15%	5 to 10%
3.6.3	Number of courses integrated with outreach activity (Sensitizing students to social issues)	>20%	15 to 20%	10 to 15%	5 to 10%
3.7 Collaboration					
3.7.1	Number of Collaborative activities (research, faculty exchange, Student exchange)	>=6	4 & 5	2 & 3	1 & 2
3.7.2	Number of industry link (for internship, on the- job training, project work, sharing of research facilities etc.)	>=15	12 to 15	9 to 12	6 to 9
3.7.3	Number of MoUs with other Institutions, industries, corporate houses etc. during the year	>=6	4 & 5	2 & 3	1 & 2
Criterion 4: Infrastructure and Learning Resources					
4.1 Physical Facilities					
4.1.1	Assessment on the adequacy of department facilities for teaching – learning, (classrooms, laboratories, computing equipment, etc.)	Qualitative Assessment			
4.1.2	Assessment on promotion of cultural activities and yoga in the department	Qualitative Assessment			
4.1.3	Adequacy of classrooms and seminar halls with ICT – enabled facilities such as smart class, LMS, etc.	Qualitative Assessment			
4.1.4	Percentage of Department Budget allocation for infrastructure augmentation.	>=35%	25 to 35%	15 to 25%	5 to 15%
4.2 Library as a Learning Resource					
4.2.1	Availability of remote access to e-resources of the library	Qualitative Assessment			
4.3 IT Infrastructure					
4.3.1	Frequency of updates of IT facilities including Wi-Fi	Qualitative Assessment			
4.3.2	Student - Computer ratio in the department	<=5:1	5:1 - 10:1	10:1 - 15:1	15:1 - 25:1
4.3.3	Adequacy of bandwidth available of internet connection	Qualitative Assessment			
4.3.4	Assessment on facilities for e-content development	Qualitative Assessment			
Criterion 5: Student Support and Progression					
5.1 Student Support					
5.1.1	Percentage of students benefited by scholarships provided by the institution	>=20%	15 to 20%	10 to 15%	5 to 10%
5.1.2	Number of programs organized for students such as Guidance for competitive examinations, Career Counselling, etc., 1.Soft skills 2. Language and communication skills 3. Life skills (Yoga, physical fitness, health and hygiene) 4. Awareness of trends in technology	All the above	Any 3 of the above	Any 2 of the above	Any 1 of the above
5.1.3	Percentage of students benefited by Guidance for competitive examinations, Career Counselling, etc.,	>=20%	15 to 20%	10 to 15%	5 to 10%
5.2 Student Progression					
5.2.1	Percentage of placement of the outgoing Batch (2019 - 2023)	>=80%	60 to 80%	40 to 60%	20 to 40%
5.2.2	Percentage of student progression to higher education and as entrepreneurs (2019 – 2023 Batch)	>=20%	15 to 20%	10 to 15%	5 to 10%
5.2.3	Number of Students qualifying in state/ national/ international level examinations during last year	>=1%	0.8 to 1%	0.6 to 0.8%	0.4 to 0.6%
5.2.4	Number of students as members of Professional societies/chapters	>=20%	15 to 20%	10 to 15%	5 to 10%
5.3 Student Participation and Activities					
5.3.1	Number of awards/medals received by students for outstanding performance in sports/cultural activities at national/international level	>=10	8 to10	6 to 8	2 to 6
5.3.2	Evidence of the presence of an active Student Council & representation of students on academic & administrative committees	Qualitative Assessment			
5.4 Alumni Engagement					
5.4.1	Number of Alumni invited for presentations (knowledge sharing, Department activities etc.)	>=10	8 to10	6 to 8	2 to 6
5.4.2	Number of Alumni participated in the alumni Association meetings held	Qualitative Assessment			
	Alumni financial contribution (in Lakhs INR)	>5	3 - 5	2-3	<2

SSN	**Department:** EEE	**Academic Year:** 2022 – 2023	**External Audit: IQAC**

Sri Sivasubramaniya Nadar College of Engineering, Kalavakkam - 603110

<u>Academic Audit Form - 2022 -2023</u>

Department Information	
Name of the Department	Dept. of Electrical and Electronics Engineering
No. of Full-time permanent Faculty	28
Academic Programmes in the Department	UG BE (EEE)
	PG ME (PED)
	PhD EEE
Student Strength Program wise	UG 345
	PG 10
No. of PhD Students	FT 27
	PT 44
Name, designation, and affiliation of the External Expert	Dr. R. Nakkeeran Professor Dept. of Electronics Engg. School of Engg. & Technology Pondicherry University Puducherry - 605 014
Signature of the External Expert	3/11/23

- The External Expert can grade each parameter with points 0,1,2,3,4 based on assessment.

- Wherever applicable, ratings may be based on the data available for the last academic years.

Criterion 1: Curricular Aspects

Sl. No.	Scope of Audit	Dept Data	Rating 4	3	2	1	0
1.1 Curriculum Design and Development							
1.1.1	Curricula is relevant to the local / national / regional / global developmental needs	✓	4				
1.1.2	Adequacy / frequency of syllabus revision carried out	✓	4				
1.1.3	Number of courses that focus on employability / entrepreneurship / skill development to the total number of courses	✓		3			
1.2 Academic Flexibility							
1.2.1	Number of new courses introduced to the total number of courses	✓	4				
1.2.2	Implementation of CBCS / elective courses in all the programs offered in the department	✓	4				
1.3 Curriculum Enrichment							
1.3.1	Percentage of Courses relevant to Gender, Environment and Sustainability, Human Values and Professional Ethics in the Curriculum	✓	4				
1.3.2	Number of value-added courses conducted during the year	✓	4				
1.3.2	Number of NPTEL-SWAYAM courses students have enrolled and successfully completed	✓	4	3			
1.3.3	Percentage of Student enrolment in the value-added courses and NPTEL-SWAYAM courses	✓		3			
1.3.4	Percentage of students undertaking field projects	✓	4				
1.3.4	Percentage of students undertaking internships	✓	4				
1.4 Feedback System							
1.4.1	System of feedback from 1) Students, 2) Teachers, 3) Employers, 4) Alumni 5) Parents, for design and review of syllabus	✓	4				
1.4.2	System of feedback collection and action taken	✓	4				
Criterion 2: Teaching- Learning and Evaluation							
2.1 Student Enrolment and Profile							
2.1.1	Percentage of students from other States in all the programs	✓				1	
2.1.2	Ratio of students to mentors	✓	4				
2.1.3	Student - Full time teacher ratio	✓	4				
2.2 Catering to Student Diversity							
2.2.1	Number of special programs organized for advanced learners	✓	4				
2.2.1	Number of special programs (Remedial / Bridge courses) organized for slow learners	✓	4				

Ratings (4 - Excellent, 3 – Very Good, 2 - Good, 1 - Average, 0 - Not Satisfactory)

Sl. No.	Scope of Audit	Dept Data	Rating				
			4	3	2	1	0
2.2.2	Evidence of mentoring process to ensure motivation of slow learners	✓	4				
2.2.3	Percentage of differently abled students (Divyangjan) on roll.	✓		3			
2.3 Teaching-Learning Process							
2.3.1	Course files and Teaching plans are available with faculty members	✓	4				
2.3.2	Use of Learning Management Systems (LMS) and e-resources (Lecture Notes/ PPTs etc.)	✓	4				
2.4 Teacher Profile and Quality							
2.4.1	Percentage of full-time faculty against sanctioned posts	✓	4				
2.4.2	Percentage of full-time faculty with Ph.D.	✓	4				
2.4.3	Average teaching experience of full-time teachers (in years)	✓	4				
2.4.4	Percentage of teachers received awards, recognition, fellowships at State, National, International level	✓		3			
2.4.5	Percentage of full-time teachers from other States in the department	✓		3			
2.5 Evaluation Process and Reforms							
2.5.1	Question Paper explores all the elements of Blooms Taxonomy	✓	4				
2.5.2	Evaluation process is in accordance with the course objectives.	✓	4				
2.5.3	Percentage of student grievances (revaluation applied) about evaluation	Not available					0
2.5.4	Integration of IT in the Examination process	Not available					0
2.6 Student Performance and Learning Outcomes							
2.6.1	POs, PSOs and COs for all Programs offered by the department are stated and displayed, communicated to teachers and students	✓	4				
2.6.2	CO-PO attainment is computed for the 2022-2023 passed out Batch and the gap analysis is performed for the courses of the department	✓	4				
2.6.3	Involvement of students in the learning/training initiatives by Government and corporate bodies.	✓	4				
2.6.4	Pass percentage of students completed the program in 2022-2023	✓	4				

SSNCE   External Academic Audit

Ratings (4 - Excellent, 3 – Very Good, 2 - Good, 1 - Average, 0 - Not Satisfactory)

Sl. No.	Scope of Audit	Dept Data	Rating 4	3	2	1	0
2.7 Student satisfaction Survey						
2.7.1	Assessment of the student satisfaction survey on teaching learning process.	✓	4				
	Criterion 3: Research, Innovations and Extension						
	3.1 Promotion of Research and Facilities						
3.1.1	Policy for promotion of research in the department	✓	4				
3.1.2	Faculty received SSN internal seed funding for research during the year	✓	4				
3.1.3	Number of teachers awarded international fellowship for advanced studies/research during the year	✓	·				0
3.1.4	Assessment on the availability of Central facilities within the department for research.	✓	4				
	3.2 Resource Mobilization for Research						
3.2.1	Number of teachers having sponsored research projects	✓	4				
3.2.2	Total Grants received through research projects sponsored by the government and non-government sources (in Lakhs INR)	✓	4				
3.2.3	Percentage of teachers recognized as research guides	✓	4				
	3.3 Innovation Ecosystem						
3.3.1	Assessment on the Participation of the department in the innovations and Incubation centers of the institution.	✓				1	
3.3.2	Number of Workshops/ seminars conducted on Intellectual Property Rights (IPR) and Industry - Academia Innovative practices.	✓	4				
3.3.3	Number of awards for innovation/research won by teachers/ research scholars/students during the year.	✓	4				
3.3.4	Number of start-ups incubated on campus from the department.	✓				1	
	3.4 Research Publications and Awards						
3.4.1	Average number of Research Scholars per Research Guide in the Department	✓		3			
3.4.2	Number of research papers published per faculty in WOS/Scopus Journals	✓			2		
3.4.3	Number of books and chapters in edited volumes published	✓					0
3.4.4	Bibliometrics of the publications during the last five years based on average citation index in Web of Science / Scopus	✓	4				

Sl. No.	Scope of Audit	Dept Data	Rating 4	3	2	1	0
3.4.5	Total number of Ph.Ds awarded during the year	✓	4				
3.4.6	Number of Patents/copyright published/awarded	✓	4				
3.5 Consultancy							
3.5.1	Revenue generated from consultancy and corporate training (in Lakhs INR)	✓					0
3.5.2	Total value of revenue shared to the faculty during the year by way of consultancy activities by faculty.	✓	4				
3.5.3	Assessment on the efforts of the department to publicize the available expertise for consultancy	✓	4				
3.6 Extension Activities							
3.6.1	Number of students participated in the extension activities of neighborhood community	✓	4				
3.6.2	Number of students participated in outreach programs such as Swachh Bharat etc., in collaboration with industry and NGOs through NSS/NCC/Red cross/YRC etc.	✓	4				
3.6.3	Number of courses integrated with outreach activity (Sensitizing students to social issues)	No Courses					0
3.7 Collaboration							
3.7.1	Number of Collaborative activities (research, faculty exchange, Student exchange)	No such activity					0
3.7.2	Number of industry link (for internship, on the- job training, project work, sharing of research facilities etc.)	✓	4				
3.7.3	Number of MoUs with other Institutions, industries, corporate houses etc. during the year	✓	4				
Criterion 4: Infrastructure and Learning Resources							
4.1 Physical Facilities							
4.1.1	Assessment on the adequacy of department facilities for teaching – learning, (classrooms, laboratories, computing equipment, etc.)	✓	4				
4.1.2	Assessment on promotion of cultural activities and yoga in the department	✓	4				
4.1.3	Adequacy of classrooms and seminar halls with ICT – enabled facilities such as smart class, LMS, etc.	✓	4				
4.1.4	Percentage of Department Budget allocation for infrastructure augmentation.	✓	4				
4.2 Library as a Learning Resource							
4.2.1	Availability of remote access to e-resources of the library	✓	4				

Ratings (4 - Excellent, 3 – Very Good, 2 - Good, 1 - Average, 0 - Not Satisfactory)

Sl. No.	Scope of Audit	Dept Data	Rating 4	3	2	1	0
4.3 IT Infrastructure							
4.3.1	Frequency of updates of IT facilities including Wi-Fi	✓	4				
4.3.2	Student - Computer ratio in the department	✓	adequate				
4.3.3	Adequacy of bandwidth available of internet connection	✓	adequate				
4.3.4	Assessment on facilities for e-content development	✓	enough				
Criterion 5: Student Support and Progression							
5.1 Student Support							
5.1.1	Percentage of students benefited by scholarships provided by the institution	✓			2		
5.1.2	Number of programs organized for students such as Guidance for competitive examinations, Career Counselling, etc.,	✓	4				
5.1.3	Percentage of students benefited by Guidance for competitive examinations, Career Counselling, etc.,	✓	4				
5.2 Student Progression							
5.2.1	Percentage of placement of the outgoing Batch (2019 - 2023)	✓	4				
5.2.2	Percentage of student progression to higher education and as entrepreneurs (2019 – 2023 Batch)	✓					0
5.2.3	Number of Students qualifying in state/ national/ international level examinations during last year	✓					0
5.2.4	Number of students as members of Professional societies/chapters	✓					0
5.3 Student Participation and Activities							
5.3.1	Number of awards/medals received by students for outstanding performance in sports/cultural activities at national/international level	✓	4				
5.3.2	Evidence of the presence of an active Student Council & representation of students on academic & administrative committees	✓	4				
5.4 Alumni Engagement							
5.4.1	Number of Alumni invited for presentations (knowledge sharing, Department activities etc.)	✓	4				
5.4.2	Number of Alumni participated in the alumni Association meetings held	✓	4				
	Alumni financial contribution (in Lakhs INR)	✓	4				

Overall Assessment

Strengths of the Department

Existence of very active research laboratories that are polarized towards product development enabled some faculty members to become entrepreneur.

Weaknesses of the Department

No exclusive research policies for the department.

Best practices followed by the Department.

To be identified

Overall Report and Recommendations for Improvement

1. overall the dept. is doing well in all aspects.

2. The dept. could help / come out with proposal to perform energy audit for the entire institute to optimize energy consumption and conservation.

Signature of the External Expert

05.10.2020

From
Dr. N. Venkateswaran, Prof,
Coordinator - IQAC
Department of BME,
SSN College of Engineering,
Kalavakkam - 603110.

To
The Principal,
SSN College of Engineering,
Kalavakkam - 603110.

Respected Sir,

Sub: Permission to conduct the IQAC External audit as per NAAC & approval of fund - reg

    I wish to inform you that the academic audit as per IQAC/NAAC requirements for the year 2022-23 is to be scheduled on in the month of OCT/NOV 2023. In this regard, about ten IQAC External academic expert members are to be invited to carry out the audit, one auditor each for the core departments of SSNCE as per NAAC criteria. The exact schedule will be drawn up based on the external auditors availability .

    In this regard, I kindly request your permission to organize the IQAC external audit and approval Rs. 1,20, 000/- (One lakhs and twenty thousand only/-) towards the expenses for the remuneration and transport (Rs 8,000 and approximately Rs 4,000 respectively per expert) of the external academic auditors.

Thanking you,

Yours sincerely,

Coordinator - IQAC

Forwarded to President
for kind approval pl.

6/10

Rs. 8000/- remuneration
approved for each expert. Upto
Rs. 4000/- approved for each expert
towards transport. Transport at
actuals to be paid