

# FOR

# 2<sup>nd</sup> CYCLE OF ACCREDITATION

# SHANMUGANATHAN ENGINEERING COLLEGE

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Submitted To

# NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL

# BANGALORE

(Draft)

# **<u>1. EXECUTIVE SUMMARY</u>**

# **1.1 INTRODUCTION**

Shanmuganathan Engineering College is a rapidly developing engineering college in Pudukkottai District, Tamilnadu. It is affiliated to Anna University, Chennai. It was established in 2001 by Mrs. Pichappa Valliammai, a great visionary and a philanthropist, in memory of her son P.Shanmuganathan, to provide the highest quality academic programmes that foster students' development and connect knowledge and practice.

Mrs. Pichappa Valliammai as the Managing Trustee of the Shanmuganathan Educational Trust guides the institution as the chairperson. Her son Dr.P.Manikandan as the correspondent and the industrialist Mr.M.Viswanathan as the Secretary are devoting themselves with a total commitment to shape this institution into a model institute of technical education. The college aims at fulfilling the main objective of the Shanmuganathan Educational Trust to provide quality higher and technical education in rural area in various branches of Science and Technology and simultaneously inculcate in the youth a sense of discipline and pride in their smart work so that they can be molded into competent technocrats.

Shanmuganathan Engineering College is located at Arasampatti near Thirumayam on the National Highway (NH-210), 17 km from Pudukkottai and 25 km from Karaikudi. The college is located in a sprawling campus amid peaceful and calm surrounding ideally suited for the pursuit of learning.

The motto of the institution is **Strive-Excel-Create.** The idea behind the College is to help students free themselves from the traditional ways of looking at things and instead constantly question and challenge themselves and society. The training methodology focuses on personality development, and improving communication skills, managerial and administrative skills, facilities for training & placement, sports and games, personality and career development etc. are the specialties of SEC.

The physical infrastructure and human resource promote ICT friendly teaching learning process and entrepreneurial ecosystem. Parent Teacher Association, Alumni, various clubs and forums work in tandem to implant academic attributes and humanistic values among students.

We offer with 5 under graduate programs in Engineering and Technology such as Civil Engineering, Computer Science and Engineering, Electrical and Electronics Engineering, Electronics and Communication Engineering and Mechanical Engineering. And also two post graduate programme Structural Engineering & Computer Science & Engineering.

#### Vision

To evolve as a Center of Academic and Research excellence by providing quality education through modern and infrastructure facilities and to serve the Rural people, Nation and the World through our Professional Graduates energized to become Leaders, Entrepreneurs and interpreters in their Profession.

#### Mission

It would be the unceasing endeavour of everyone in the institution to prepare the students to face stiff competition and coping with the continuous rapid strides in technology with courage and confidence by providing them every opportunity to attain a higher degree of professional competence.

# **1.2 Strength, Weakness, Opportunity and Challenges(SWOC)**

#### Institutional Strength

- Dedicated and proactive management with good academic background
- Well maintained infrastructure and laboratory facilities.
- Eco-friendly and conducive working atmosphere.
- 78 dynamic and well qualified post graduated faculty members, 07 faculty members have completed Ph.Ds.
- Constant encouragement given to the faculty members to pursue higher studies, research and Ph.Ds.
- Fully Wi-Fi enabled campus.
- IQAC cell to enhance the quality culture and initiatives towards the satisfaction of the stakeholders.
- Produced considerable number of university rank holders every academic year
- Fully equipped spacious Library with more than 38,000 books and provision for Wi-Fi connectivity and internet access.
- Faculty members and students are members of professional bodies like ISTE, CSI chapter etc.
- Regularly organizes National Conferences, Technical Symposiums, Workshops, Seminars and Departmental association activities etc.
- Merit based educational scholarship /tuition fee concession to financially weak and meritorious students.
- Mentor system for counselling the students and to enable the smooth implementation of continuous evaluation of academic process.
- Training and placement cell is dedicated to place students in reputed companies.
- Sports ground with athletic track and facilities for various indoor and outdoor games.

#### **Institutional Weakness**

- Being an affiliated institution to the Anna University, have limited academic syllabus and curriculum.
- Institution is located in the rural area.
- Expectations of stake holders are very high
- Institution need to apply and get Research centers.

#### **Institutional Opportunity**

- Use of available young, dynamic and potential Faculty members to excel in the academics, R&D.
- The Institute is located near BHEL, Thirumayam, which is a hub for Mechanical and Electrical Engineering. Hence, more Industry-Institute-Interactions can be achieved rigorously.
- The Institute has good human resource to undertake industrial research and collaborative programs.
- To facilitate more students to become entrepreneurs.
- The COVID-19 pandemic has given an opportunity to re-invent modes and methods of teaching.

- To get an autonomous status after the accreditation of NAAC & NBA
- Applying for research grants from government and non-government funding agencies.

#### **Institutional Challenge**

- Norms and Regulations by Regulatory Authorities
- Retention of Senior Faculties and Ph.D. holders
- Fulfill the changing scenario in the education sector
- To train each staff in their domain to excel themselves in future
- Educating the rural students with poor communication skills.
- Coping with rapid changes in technology to improve the employability of the students.
- Training students with rural background in social and professional etiquette, communication, technical and other skills for employability.
- Difficult to catch the attention of professionals with good academic profiles from industry in view of institute's geographical location.
- Institution being located in a rural area achieving admissions to the level of sanctioned intake.

# **1.3 CRITERIA WISE SUMMARY**

#### **Curricular Aspects**

- The Institute is affiliated to Anna University, Chennai. The Institution ensures effective curriculum delivery and semester wise documented process in alignment with the university issued calendar of events. Department Academic Committee holds meetings of stakeholders and develops strategies for effective implementation of the curriculum through the lesson plan and teaching schedule.
- College follows the principle of Outcome Based Education (OBE). Subjects are allotted to teachers based on their specialization and experience. In addition to courses in the curriculum, different activities are planned to focus on the socio cultural issues. Students are encouraged to take part in internships. Students and faculty members are encouraged to present their research papers in various national and international conferences and publish them in journals.
- Workshops, Seminars and Faculty Development Programmes are organised to improve the knowledge of faculty.
- Conventional teaching practice of blackboard and chalk is commonly used along with LCD, PPT, and NPTEL course materials for better comprehension of content of subjects. Furthermore, faculty are advised to employ instructive innovations through presentations, course work, group discussions, brainstorming sessions, workshops, seminars and industry visits.
- Feedback from students is collected at the end of every semester regarding the performance of teachers and used for academic progress.
- Students are encouraged to participate in various symposiums, workshops, seminars to improve their skills. Students are counselled to enroll for relevant certificate courses to reinforce their placement opportunities.
- Mandatory courses like Environmental Science, Gender Sensitization, Human Values, Disaster Management and Professional Ethics are imparted to students as per Anna university curriculum. Choice based credit system and credit based semester system as indicated by UGC and curriculum course structure as suggested by AICTE is followed.
- All the programs offer elective courses and Choice Based Credit System (CBCS). Feedback from

faculty, parents and alumni is collected and utilized for overall development of personality of students and for subsequent year planning for better performance of the students.

• In line with the vision and mission of the institution as well as needs of the community and nation, concepts of academic ethics are instilled in the minds of students.

#### **Teaching-learning and Evaluation**

- Institute adopts innovative methods such as Social Projects, Seminars, Training, Video lectures, Computer Program contest and Industrial visits.
- Anna University regulates the admissions of engineering colleges for UG programs through centralized admission procedure. Institution follows the reservation policy of the State Government.
- Faculty-student ratio is maintained as per AICTE, New Delhi.
- Faculty draft the teaching schedules as per the guidelines and academic calendar prescribed by Anna university for affiliated colleges for each semester.
- Faculty maintain a course file comprising copy of syllabus, course objectives, outcomes, notes, question papers, answers and assignments.
- Chalk & Talk, PPTs, NPTEL Videos, Seminars, Workshops, Presentations, Quizzes, Group Discussions, Debates and ICT resources are used as the instructional methods.
- Learning strategies applied are self-directed learning, co-operative learning, role playing, peer education and parent involvement.
- Wi-Fi access is provided for all to have access to DELNET, NDL, NPTEL video lectures, e-journals and e-books.
- Students' centric methods are adopted by providing counselling, training for placement and soft skills.
- Guest lectures, field visits, internships and industrial tours are organized to acquire hands-on experience.
- Bright students are facilitated with practice sessions on GATE and competitive exams. Slow learners are helped by identifying the area of their weakness and by imparting subject knowledge through Remedial, Revision and Bridge classes held after class work schedule.
- Mentors are allocated to monitor students' progress and behaviour in class rooms.
- Faculty plan various activities like quiz, debate & seminar to improve the students' interest on the subject.
- Financial assistance is provided to faculty who improve their qualifications and attend workshops, seminars, conferences and publish papers in recognized journals.
- Transparent mechanism is adopted for conducting examinations and evaluation process.
- Internal evaluation is done as per the guidelines of Anna University. Two internal and model examinations are held for each semester.
- Grievances will be rectified by the concerned faculty.
- A set of PEO's, PO's, PSO's and CO's are defined. Subjects are assigned to faculty based on their competency, subject expertise and experience. Faculty members prepare a course file along with the structured lesson plan as per guidelines given by IQAC.

## **Research, Innovations and Extension**

- A Research and Development (R&D) Cell is formed to encourage innovation and to harmonize the research activities of Civil Engineering department.
- The faculty members are encouraged to complete their Ph.D. by providing on duty facility. Incubation

Centre is established.

- The college subscribes to e-Journals and budget allocation is done to facilitate Research activities. Thus the institution provides resources for the propagation of innovative ideas.
- The institute supports publication of research papers in peer reviewed, UGC approved journals and conference proceedings.
- Financial support & rewards are offered to that faculty who present paper in National and International Conferences and Seminars and to those who publish papers in National and International Journals.
- As a part of Institute-Industry interaction, the institute has functional MOUs and collaboration with industries. Consequently, students go for internship and also work on mini projects in various industries to enhance their practical experience.
- Guest Lectures, Workshops, Technical Seminars, Conferences and training sessions are organized on regular basis to develop awareness and to corroborate research oriented approach of learning in students.
- Students and faculty gain hands-on experience in their specialization through Industrial and site visits. Policies are also framed to motivate faculty members for consultancy activities.

Extension Activities:

- Institute conducts project expo and science expo, where students display their projects and their innovative ideas. It has also conducted science expo for polytechnic and school students to encourage the young mind who displays their models / Ideas and those who visit the expo. For developing sensitivities towards community issues, gender disparities, social inequity etc. and to inculcate values and commitment to society.
- NSS, Red-Ribbon club and YRC unit of the institute promotes. Extension activities such as Swachh Bharat, AIDS Awareness, Gender Issue, blood donation camp, Rally for election awareness, road safety, campus cleaning, tree plantation, covid-19 virus awareness programme etc., in the neighborhood community.

#### **Infrastructure and Learning Resources**

- The Institute allocates adequate budget for providing and maintaining infrastructure, laboratories with learning resources like ICT and class rooms.
- Students are well supported by good academic ambience, basic amenities, experienced and well qualified faculty.
- Academic blocks with state-of-the-art laboratories, workshops, standby 125 KVA and 75 KVA generators and hostel facilities for boys and girls, of the infrastructural facilities available on campus.
- The institute possesses domain centric laboratories as prescribed by university.
- Students are helped to acquire English language communication skills through platform of Language lab having Globarena software.
- Equipped with photocopier, Central library maintains all the books and journals as per AICTE norms.
- Teachers and students can have Digital access of all resources.
- Institute provides first-rate facilities and extensive infrastructure for Sports and Games activities through indoor games facilities, gymnasium, open playgrounds for outdoor games, and the guidance from qualified Physical Director.
- Students are encouraged to participate in college level & university competitions.
- Departments organize technical and non-technical events as part of Association Activities to build competency among students.

- The institute provides adequate ICT facilities and student computer ratio as per the norms for effective teaching and learning process. 350 systems are connected in LAN with internet facility.
- The entire campus including departments, staff rooms, library and offices is Wi-Fi enabled with 100 Mbps speed.
- A maintenance team monitors the maintenance of classrooms, library, laboratories and playgrounds. The institute has 10 KW roof top, grid connected solar power plant.
- RO mineral water plant with discharge capacity of 200 litres per day is also made available to all the wings to cater to the needs of entire campus.
- Effectively planned procedures are executed for maintenance and utilization of infrastructure pertaining to academic, co-curricular, extra-curricular activities and other basic amenities.

#### **Student Support and Progression**

- Institute provides required guidance and organize activities through different cells essential for meaningful experiences, accomplishment in academics, success in career, community and there by overall progression.
- Bridge courses and value added courses are arranged in relevant areas.
- Induction program is planned for the first year students to engage them in academic, co-curricular and extracurricular activities.
- 15 students are allotted to one mentor to help them achieve their goals and to assess their progression through Assignments and feedback mechanism.
- Students' performance in examinations is evaluated followed by remedial actions.
- Research & Development cell, Placement cell, Anti-Ragging Committee, Grievance Redressal Committee, Alumni Association, Student etc. are established to support students.
- T&P cell offers pre-placement guidance, career guidance, and arranges for soft skills training programmes. Through these programmes, students improve performance in prerequisite skills for employment such as resume preparation, group discussions and interviews.
- Through professional bodies students are involved in paper presentation, technical quiz, poster presentation, coding competitions, seminars, workshops etc. for the improvement of their competencies.
- The Women Empowerment Cell, Grievance Redressal Cell and the Anti-Ragging Committee of the institute help in maintaining a harmonious environment on campus.
- Students take part in social, cultural activities, games and sports events and are encouraged to participate in intra murals, inter-collegiate, district and state level competitions.
- Through NSS activities, students acquire social responsibility, skills and competencies for overall development.
- Many Students opt for higher education in India and abroad, entrepreneurship and employment Alumni Association contributes through financial and non-financial resources for academic matters.
- Guest lectures are arranged to understand latest technical information and competition in job market.
- Alumni entrepreneur members offer project assistance, internships and training programmes for students.

#### **Governance, Leadership and Management**

• Through e-governance & leadership, the Management is committed to create socially responsible and ethically conscious and competent engineers. Through involvement of stakeholders, an environment of quality learning is facilitated conforming to values, vision and mission of the institute.

- Clubs, committees and associations are constituted for the academic and holistic growth of the students. They implement the resolutions taken in their meetings and also by the governing body for better functioning of the institute.
- All stakeholders involve in professional development programs like conferences, FDPs, student development activities.
- Trainings in specialized areas are provided with required financial assistance to faculty to teach more effectively on emerging trends and technologies. Through performance appraisal system, the administration pursues continuous professional advancement of the faculty. Service rules and welfare schemes for staff including promotion system are meticulously followed.
- The Institute organizes Technical Symposium, Seminars, Workshops for the overall development of students and to infuse leadership qualities among students and staff.
- Based on the Vision and Mission of the institute and inputs from various stakeholders, the Quality Policy is drafted. The decentralized structure set up at the institute provides opportunity to second level employees for leadership, for building the organizational culture and for growth of organization. They are involved to have autonomy in academic and administrative decisions and to carry out the mantle with ease in the times of need.
- Institute executes a transparent streamlined process for optimal utilization of financial resources for infrastructure and human resources. Financial audits are conducted to ensure transparency in financial management. The administration and academia work in synergy for smooth and effective governance.
- Internal Quality Assurance Cell supervises the quality of the institution in academic, non-academic and administrative functions which fulfil Vision, Mission and Quality policy of the institution. The IQAC ensures that quality is initiated, promoted and sustained in every activity. It implements all methodically prepared strategies for enhancement of professional competency of the faculty & students.
- Quality enhancement strategies like participation in Orientation Programs, Seminars, Refresher Courses, Faculty Development Programs, Paper Presentations in Conferences, encouraging Research etc. are implemented for faculty development.

#### **Institutional Values and Best Practices**

- Setting standards and attaining excellence by involving all stakeholders actively in the teaching and learning process is the factor that is implemented strictly at the institute. With skill-based training to students, the institute assures to inculcate values and best practicing methods among students.
- Roof top solar power plants are installed for power generation as an eco-friendly alternative. LED lamps are used across the campus to conserve energy.
- Constant surveillance and vigilance are effectively implemented by security personals and by installing CCTV cameras at vantage points in the campus.
- To contribute for environment sustainability, solid wastes are collected daily and dumped to decompose. Rain water harvesting is done to help recharge groundwater and avoid water crisis. Waste water from each block is recycled and diverted towards agriculture lands and gardens. Plastic free environment is maintained on the campus.
- The e-waste generated is given to the authorized dealers who purchase the scrap and reuse the useful components.
- Programmes like women's day celebration week is organized on 'Gender Equity' and on 'Women Empowerment' to infuse the value of respect for women in society and to instill the value of nondiscriminatory behavior. Presence of more girls in our institute indicates the healthy environment for female in the college.
- Social & health awareness programs are organized for the development of local community and to

infuse the value of social responsibility among the students. Various social activities are organized under the guidance of NSS and departmental associations.

- Traditional festivals in addition to Teachers' Day, Women's Day, and Engineers' Day are conducted for the promotion of universal values.
- Women's Grievance Cell and Complaint cum Redressal Committee resolve the grievances of the girl students.

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# **2. PROFILE**

# **2.1 BASIC INFORMATION**

Name and Address of the College			
Name	SHANMUGANATHAN ENGINEERING COLLEGE		
Address	Arasampatti, Thirumayam Taluk.		
City	PUDUKKOTTAI		
State	Tamil Nadu		
Pin	622507		
Website	www.shanmuganathanengg.in		

Contacts for Communication						
Designation	Name	Telephone with STD Code	Mobile	Fax	Email	
Principal	Kl.muthuram u	04333-274913	9443440692	-	shanmuganathanen gg@gmail.com	
IQAC / CIQA coordinator	M.varadaraja n	04333-274914	9840409497	04333-27491 2	dr.mvr.pmu@gmai l.com	

Status of the Institution	
Institution Status	Private and Self Financing

Type of Institution			
By Gender	Co-education		
By Shift	Regular		

Recognized Minority institution		
If it is a recognized minroity institution	No	

Establishment Details	
Date of establishment of the college	02-07-2001

University to which the college)	college is affiliated/ or which gov	verns the college (if it is a constituen
State	University name	Document
Tamil Nadu	Anna University	View Document
Details of UGC recogni	tion	
Under Section	Date	<b>View Document</b>
2f of UGC		

0	nition/approval by sta MCI,DCI,PCI,RCI etc		bodies like	
Statutory Regulatory Authority	Recognition/App roval details Inst itution/Departme nt programme	Day,Month and year(dd-mm- yyyy)	Validity in months	Remarks
AICTE	View Document	10-07-2021	12	

Details of autonomy	
Does the affiliating university Act provide for conferment of autonomy (as recognized by the UGC), on its affiliated colleges?	No

Recognitions	
Is the College recognized by UGC as a College with Potential for Excellence(CPE)?	No
Is the College recognized for its performance by any other governmental agency?	No

Location and Area of Campus					
Campus Type	Campus Area in Acres	Built up Area in sq.mts.			
Main campus area	Arasampatti, Thirumayam Taluk.	Rural	25.12	22949.08	

# **2.2 ACADEMIC INFORMATION**

Details of Pro	Details of Programmes Offered by the College (Give Data for Current Academic year)						
Programme Level	Name of Pr ogramme/C ourse	Duration in Months	Entry Qualificatio n	Medium of Instruction	Sanctioned Strength	No.of Students Admitted	
UG	BE,Civil Engineering	48	XII	English	60	10	
UG	BE,Compute r Science And Engineering	48	XII	English	60	41	
UG	BE,Electroni cs And Com munication Engineering	48	XII	English	30	16	
UG	BE,Electrical And Electronics Engineering	48	XII	English	30	13	
UG	BE,Mechani cal Engineering	48	XII	English	60	8	
PG	ME,Comput er Science And Engineering	24	UG	English	24	0	
PG	ME,Structur al Engineering	24	UG	English	24	0	

Position Details of Faculty & Staff in the College

				Te	aching	g Facult	у					
	Profe	essor			Asso	ciate Pr	ofessor		Assis	stant Pr	ofessor	
	Male	Female	Others	Total	Male	Female	Others	Total	Male	Female	Others	Total
Sanctioned by the UGC /University State Government		1	1	5		1		1		1		72
Recruited	5	0	0	5	0	1	0	1	38	34	0	72
Yet to Recruit				0				0				0
Sanctioned by the Management/Soci ety or Other Authorized Bodies				0				0	J			0
Recruited	0	0	0	0	0	0	0	0	0	0	0	0
Yet to Recruit			1	0				0				0

		Non-Teaching	Staff	
	Male	Female	Others	Total
Sanctioned by the UGC /University State Government	7			18
Recruited	11	7	0	18
Yet to Recruit				0
Sanctioned by the Management/Society or Other Authorized Bodies				0
Recruited	0	0	0	0
Yet to Recruit				0

		<b>Technical St</b>	aff	
	Male	Female	Others	Total
Sanctioned by the UGC /University State Government				6
Recruited	6	0	0	6
Yet to Recruit				0
Sanctioned by the Management/Society or Other Authorized Bodies				0
Recruited	0	0	0	0
Yet to Recruit				0

# Qualification Details of the Teaching Staff

	Permanent Teachers											
Highest Qualificatio n	Qualificatio		Associate Professor			Assistant Professor						
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total		
D.sc/D.Litt.	0	0	0	0	0	0	0	0	0	0		
Ph.D.	5	0	0	0	1	0	1	0	0	7		
M.Phil.	0	0	0	0	0	0	1	9	0	10		
PG	0	0	0	0	0	0	36	25	0	61		

	Temporary Teachers										
Highest Qualificatio n	Professor D		Associate Professor			Assistant Professor					
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total	
D.sc/D.Litt.	0	0	0	0	0	0	0	0	0	0	
Ph.D.	0	0	0	0	0	0	0	0	0	0	
M.Phil.	0	0	0	0	0	0	0	0	0	0	
PG	0	0	0	0	0	0	0	0	0	0	

	Part Time Teachers										
Highest Professor Qualificatio n 4		Associate Professor			Assistant Professor						
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total	
D.sc/D.Litt.	0	0	0	0	0	0	0	0	0	0	
Ph.D.	0	0	0	0	0	0	0	0	0	0	
M.Phil.	0	0	0	0	0	0	0	0	0	0	
PG	0	0	0	0	0	0	0	0	0	0	

Details of Visting/Guest Faculties						
Number of Visiting/Guest Faculty	Male	Female	Others	Total		
engaged with the college?	0	0	0	0		

Provide the Following Details of Students Enrolled in the College During the Current Academic Year

Programme		From the State Where College is Located	From Other States of India	NRI Students	Foreign Students	Total
PG	Male	0	0	0	0	0
	Female	0	0	0	0	0
	Others	0	0	0	0	0
UG	Male	60	0	0	0	60
	Female	28	0	0	0	28
	Others	0	0	0	0	0

Provide the Following Details of Students admitted to the College During the last four Academic Years

Programme		Year 1	Year 2	Year 3	Year 4
SC	Male	4	13	14	12
	Female	11	5	16	12
	Others	0	0	0	0
ST	Male	0	0	0	0
	Female	0	0	0	0
	Others	0	0	0	0
OBC	Male	52	47	41	89
	Female	16	24	26	37
	Others	0	0	0	0
General	Male	4	0	0	3
	Female	1	0	4	1
	Others	0	0	0	0
Others	Male	0	0	0	0
	Female	0	0	0	0
	Others	0	0	0	0
Total		88	89	101	154

# **Extended Profile**

# 1 Program

## 1.1

#### Number of courses offered by the Institution across all programs during the last five years

2020-21	2019-20	2018-19		2017-18	2016-17			
326	362	364	364		396			
File Description				Document				
Institutional data prescribed format			View Document					

## 1.2

## Number of programs offered year-wise for last five years

2020-21	2019-20	2018-19	2017-18	2016-17
7	8	8	8	9

# 2 Students

2.1

#### Number of students year-wise during last five years

2020-21	2019-20	2018-19		2017-18	2016-17			
432	547	634		787	958			
File Description				Document				
Institutional data in prescribed format				View Document				

#### 2.2

# Number of seats earmarked for reserved category as per GOI/State Govt rule year-wise during last five years

2020-21	2019-20	2018-19	2017-18	2016-17
240	300	300	420	420

File Description	Document
Institutional data in prescribed format	View Document

## 2.3

#### Number of outgoing / final year students year-wise during last five years

Institutional data in prescribed format		View Document				
File Description		Document				
117	37	86		112	255	
2020-21	2019-20	2018-19		2017-18	2016-17	

# **3 Teachers**

## 3.1

#### Number of full time teachers year-wise during the last five years

2020-21	2019-20	2018-19		2017-18	2016-17
78	89	101		111	127
File Description			Docum	nent	
-		View ]	Document		

## 3.2

## Number of sanctioned posts year-wise during last five years

2020-21	2019-20	2018-19		2017-18	2016-17
78	83	110		127	127
File Description		Document			
Institutional data in	n prescribed format		View Document		

# **4** Institution

## 4.1

Total number of classrooms and seminar halls

## Response: 53

## 4.2

## Total Expenditure excluding salary year-wise during last five years ( INR in Lakhs)

2020-21	2019-20	2018-19	2017-18	2016-17
153.11	292.658	462.554	371.035	408.265

4.3

## Number of Computers

Response: 350

# 4. Quality Indicator Framework(QIF)

# **Criterion 1 - Curricular Aspects**

## **1.1 Curricular Planning and Implementation**

**1.1.1** The Institution ensures effective curriculum delivery through a well planned and documented process

#### **Response:**

The institution follows the Curriculum and Syllabi prescribed by the Anna University, Chennai, for Affiliated Colleges. To ensure curriculum delivery, the following procedure is adopted by the institution

- The institution develops academic calendar based on academic schedule of Anna University for Affiliated Colleges
- Subjects were allocated to the teaching faculty based on their qualification, area of specialization, experience and willingness.
- Advising the students to select their core electives based on industrial requirement
- The lesson plan and instruction plan for each and every subject is prepared by the faculty before the commencement of the semester and it is duly approved by the Head of the Department and Head of the Institution.
- Class Committee meetings are conducted, thrice in a semester, by the Head of the Department as chairperson to improve the teaching learning process, academic progress of the students, grievances if any, and suitable remedial measures are taken
- Head of the Department do a periodical review of the portions covered by the staff members and also the student's attendance and the same is reviewed by the Principal during HoD's meeting.
- Course files are prepared and maintained by the faculty
- Question banks, Lecture Notes and Lab Manuals are prepared by the Staff members. The same is verified by the head of the department and provided to the students.
- To enrich the knowledge of students, faculty members adopt different techniques, such as assignments, NPTEL lectures, case studies, projects, field trip, etc., apart from traditional methods with ICT facilities
- Guest lectures of eminent faculty members from other institutions are arranged to give exposure of the current trends and the latest subject knowledge.
- Assignments, seminars and project are given to the students under the supervision of the faculty.
- The departments organizes field project and industrial visits for students' exposure to practical knowledge
- Persuade the teaching faculty with the task of mentoring students on academic and personal issues thereby strengthening better learning atmosphere and to sustain their performance

File Description	Document
Upload Additional information	View Document
Link for Additional information	View Document

#### 1.1.2 The institution adheres to the academic calendar including for the conduct of CIE

#### **Response:**

An academic calendar is prepared at the beginning of each semester in line with the University's calendar for Affiliated Colleges consisting of various curricular, extra and co-curricular activities. The calendar is uploaded on college website, displayed on notice boards and is communicated to students through emails. It is updated and revised with respect to any changes suggested by Anna University for Affiliated Colleges

- The dates of Internal Assessment Test-1, Internal Assessment Test-2 and Model Examinations are mentioned in the academic calendar.
- Detailed Examination schedule is announced in advance by Examination Cell convener through the head of the institution
- The students' academic progress is monitored regularly by adopting the strategy of continuous internal evaluation, seminars, project work, internal assessment test and end semester examinations.
- To maintain further compliance, answer scripts are evaluated within three days after the commencement of each examination.
- In case of laboratories and projects, internal viva and practical exams are conducted by respective departments before the model examinations.
- Two sets of question paper for internal exams are prepared by concerned faculty and is approved by head of the department.
- The answer scripts are evaluated by another faculty in each department to ensure transparent and unbiased evaluation.

File Description	Document
Upload Additional information	View Document

**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 last five years

1. Academic council/BoS of Affiliating university

2. Setting of question papers for UG/PG programs

- 3. Design and Development of Curriculum for Add on/ certificate/ Diploma Courses
- 4. Assessment /evaluation process of the affiliating University

**Response:** D. Any 1 of the above

File Description	Document
Institutional data in prescribed format	View Document
Details of participation of teachers in various bodies/activities provided as a response to the metric	<u>View Document</u>

## **1.2 Academic Flexibility**

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

#### Response: 100

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

Response: 7

File Description	Document
Institutional data in prescribed format	View Document

#### **1.2.2** Number of Add on /Certificate programs offered during the last five years

#### **Response:** 12

#### 1.2.2.1 How many Add on /Certificate programs are offered within the last 5 years.

2020-21	2019-20	2018-19	2017-18	2016-17
3	4	5	0	0

File Description	Document
List of Add on /Certificate programs	View Document
Brochure or any other document relating to Add on /Certificate programs	<u>View Document</u>
Any additional information	View Document

# **1.2.3** Average percentage of students enrolled in Certificate/ Add-on programs as against the total number of students during the last five years

**Response:** 20.64

1.2.3.1 Number of students enrolled in subject related Certificate or Add-on programs year wise during last five years

2020-21	2019-20	2018-19	2017-18	2016-17
119	187	263	0	0

File Description	Document
Details of the students enrolled in Subjects related to certificate/Add-on programs	View Document

## **1.3 Curriculum Enrichment**

**1.3.1** Institution integrates crosscutting issues relevant to Professional Ethics ,Gender, Human Values ,Environment and Sustainability into the Curriculum

#### **Response:**

**Courses to address Environment and Sustainability:** All B.E. students are studying the subject Environmental Science and Engineering (GE 6351 & GE 8291). The objective of this course is to learn about nature, facts about environment,

- finding and implementing scientific, technological, economic and political solutions to environmental problems and the problems faced by the environment.
- Courses to address Human Values and Professional Ethics: The curriculum includes courses on "Professional Ethics in Engineering" (GE 6075 and GE8076) to all the students. This enables the student to learn global issues, moral leadership, code of conduct, loyalty and to appreciate the rights of others
- Equal opportunities are given to both the genders in terms of admissions, employment, training programmes, sports activities etc., and so gender issues do not arise.
- Girls and boys are encouraged to participate in various co-curricular activities such as paper presentations, organization of paper contests, group discussions and technical quiz programmes
- Both boys and girls are made members of various academic, co-curricular and extra-curricular activities.
- Students were taken for field visits to water treatment plants where they learnt the maintenance of water shed for sustainability and environmental issues.
- Awareness programmes are also initiated by which extensively carry out activities like tree plantation, waste management for environmental awareness, protection and ecological preservation.

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

# **1.3.2** Average percentage of courses that include experiential learning through project work/field work/internship during last five years

#### Response: 4.19

1.3.2.1 Number of courses that include experiential learning through project work/field

#### work/internship year-wise during last five years

2020-21	2019-20	2018-19	2017-18	2016-17
17	15	15	15	14

File Description	Document
Programme / Curriculum/ Syllabus of the courses	View Document
MoU's with relevant organizations for these courses, if any Average percentage of courses that include experiential learning through project work/field work/internship	<u>View Document</u>

# **1.3.3** Percentage of students undertaking project work/field work/ internships (Data for the latest completed academic year

#### Response: 52.78

#### 1.3.3.1 Number of students undertaking project work/field work / internships

Response: 228

File Description	Document
List of programmes and number of students undertaking project work/field work/ /internships	View Document
Any additional information	View Document

## **1.4 Feedback System**

**1.4.1** Institution obtains feedback on the syllabus and its transaction at the institution from the following stakeholders 1) Students 2)Teachers 3)Employers 4)Alumni

#### **Response:** A. All of the above

File Description	Document	
Any additional information (Upload)	View Document	
URL for stakeholder feedback report	View Document	

#### **1.4.2** Feedback process of the Institution may be classified as follows: Options:

1. Feedback collected, analysed and action taken and feedback available on website

- 2. Feedback collected, analysed and action has been taken
- 3. Feedback collected and analysed
- 4. Feedback collected
- 5. Feedback not collected

**Response:** C. Feedback collected and analysed

File Description	Document
Upload any additional information	View Document



# **Criterion 2 - Teaching-learning and Evaluation**

## **2.1 Student Enrollment and Profile**

Response: 37							
2.1.1.1 Number of students admitted year-wise during last five years							
2020-21 2019-20 2018-19 2017-18 201							
88	89	101	154	203			
		101 ts year wise during 2018-19	C	203			

File Description	Document
Institutional data in prescribed format	View Document
Any additional information	View Document

2.1.2 Average percentage of seats filled against reserved categories (SC, ST, OBC, Divyangjan, etc. as per applicable reservation policy ) during the last five years ( exclusive of supernumerary seats)

**Response:** 37

2.1.2.1 Number of actual students admitted from the reserved categories year-wise during the last five years

2020-21	2019-20	2018-19	2017-18	2016-17
88	89	101	154	203

File Description	Document
Average percentage of seats filled against seats reserved	View Document
Any additional information	View Document

## **2.2 Catering to Student Diversity**

# **2.2.1** The institution assesses the learning levels of the students and organises special Programmes for advanced learners and slow learners

#### **Response:**

The institute has a structured mechanism for assessing the learning levels of the students and continuously monitors the same for improving their academic as well as overall performance.

# **Guidelines for identifying Advanced and Slow Learners**

- The performance of the students in the first Internal Assessment (IA1) enables the faculty members to identify the Advanced Learners and the Slow Learners.
- During the progress of semesters, the advanced learners and slow learners are identified based on their overall performance of previous semesters, orientation towards academics and feedback from subject teachers.
- The implication of academically slow learner means those who could not keep pace with the classroom teaching who needs extra attention so as to bring such students at par with the rest of the students of the class.

## **Special activities are conducted for Advanced Learners**

- Encouraging them with extra care to obtain University ranks.
- Discussion or seminar on the advanced topic.
- Guiding and encouraging publishing research papers in conferences/Journals.
- Training programs for gaining advanced technical knowledge
- Encouraging to participate in various external activities like symposiums, poster presentation, Conferences, inter institution competition etc.
- Motivating them to do micro projects to inculcate research orientation and practical awareness in the 2nd year apart from mini and major projects.
- Providing opportunities to develop their creativity by participating and organizing intercollegiate as well as national level technical symposiums.
- Guiding and encouraging the students to prepare and appear for GATE / Competitive Examinations.
- Guiding for career planning.

## Measures taken for improving academic performance of Slow Learners

- Remedial/Extra classes are conducted with appropriate focus on the subject/topic codes in which the students are found to be slow learners.
- Individual academic counseling is done by concerned subject teacher.
- The institute has a system to communicate performance and attendance of students to parents regularly. Set of students are assigned for a faculty to act as mentor, and personal and academic care is completely taken care by the corresponding mentor.
- Mentor communicates regularly with parents and also sends along with report cards after each assessment tests.
- Learning material prepared by subject handling faculty members are verified by HoDs and issued regularly for student's reference.
- Each department conducts remedial classes; provide course notes for slow learners and to those students who are in the verge of dropping out due to arrear subjects.
- Those students are given regular class tests by the respective subject teachers in order to improve their performance in the university exam, Further faculty members revise the tough topics as per the students requisition and provide university question bank and discuss the way of presenting the answers in the exam to score marks.
- Individual subject teachers provide daily home assignments and conduct weekly class tests which gives a real-time assessment of levels of understanding.

File Description	Document
Upload any additional information	View Document

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

#### Response: 6:1

File Description	Document
Any additional information	View Document

## **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

## **Response:**

In addition to traditional teaching-learning methods, the institute is highly interested in providing innovative methods for enriching the learning experience. The methodologies include illustration, special lectures, field study, case-studies, project-based-methods and experimental methods.

# Lecture method

This conventional method is commonly adopted by all the teachers. This method facilitates the teacher to interpret, explain and revise the content of a text only for better understanding of the subject by the learners. At the end of instruction of each unit, the students are given with specific assignment which enriches their learning.

# a) Experiential Learning

Students are made to have experiential learning as they go through their practical sessions in the laboratories as a part of their curriculum. In addition to the regular laboratories that are prescribed in the curriculum, students are encouraged to form groups and do mini projects. These projects may be related to the subjects that they are currently studying or they could be connected to any other area of their interest. The mini projects are presented by the students to their peers. In addition value added courses and industry oriented workshops are arranged to give hands on training and exposure to the latest cutting edge technologies. Every year Industrial visits are arranged for the students to get an exposure to industrial practices. The faculty members foster learning environment by engaging in rich experiential content of teaching through experimentation, demonstration, visual aids, periodical industrial visits, Internships, Implant Training, organizing exhibitions as well as presenting papers.

## b) Participative Learning

Student centric participative learning methods include periodic endowment lectures, seminars and group discussions on latest technologies. Industry experts and alumni are invited to deliver lectures at the end of which a question and answer session, is opened up. During this time students are encouraged to actively participate and get their doubts clarified. To enhance student participation in diverse activities our institution has various professional societies such as ISTE, ICT academy etc. The students are encouraged to participate in project contests, paper presentations, coding contests, project expos, workshops, symposia, conferences etc.

Two of our students received the ISTE Best student award at the 17th ISTE Tamilnadu Section Students Convention-2018 held on 10th April 2018 at Tagore Engineering College Chennai.

## c) Problem Solving Methodologies

The problem solving capability of the students can be stimulated by making them work on case studies during the internal assessment examinations. Students of undergraduate programmes undergo internship programmes. Some of the students also take up NPTEL online courses to gain knowledge in various

subjects in addition to the regular academic curriculum. Industry experts also share problems that can be assigned as final year projects to the students.

Analytical subjects in the curriculum are allotted tutorial hours. During these hours problems related to the subject are solved. Students are also given problems as assignments to supplement and enhance the regular teaching learning process. Laboratories are well equipped with internet facility which enables students to self-learn and widen their learning skills.

File Description	Document
Upload any additional information	View Document

## 2.3.2 Teachers use ICT enabled tools for effective teaching-learning process.

#### **Response:**

The institute always strives to make the latest Information and Communication Technology (ICT) infrastructure available for use by its students, faculty, and technical staff members in the campus. The learning experiences of the students are enriched with the latest state-of-the-art educational technologies used by the teachers and by adequate use of the ICT enabled tools to its optimum level for making the teaching-learning process effectual.

Information and Communications Technology (ICT) can impact student learning when teachers are digitally literate and understand how to integrate it into the academic curriculum. ICT supports, enhances and optimizes the delivery of content. Students who are continuously exposed to ICT have better exposure, presentation skills, and innovative capabilities and are ready to take more efforts into learning as compared to their counterparts.

Smart classrooms pave a way for learning and understanding the curriculum with ease. Each department has one smart classroom, provided with LCD projector, a computer with internet connection and smart board. Workshops and guest lectures are conducted here for effective learning. Staff members use the smart class room to take lectures with the help of photos, maps, graphs, flowcharts and animated videos. Use of smart classrooms makes learning more interesting and easy to understand. The presentations are directly shared with all the participants. The students are encouraged to take seminars which include application oriented and technically upcoming topics. Besides printed books and journals, the library subscribes to a large number of e-journals in the field of Engineering, Science, and Management with facilities for accessing online and offline databases.

NPTEL Video lectures and many other renowned educational websites are available offline in the college library and could be accessed by the students from the laboratories. This will allow them to think and learn practically rather than just grabbing theoretical facts.

Google Classroom is used to streamline the process of sharing files between teachers and students, which makes learning much more interactive when compared to other common methods. The students submit

assignments through the app which can be graded by the course handling faculty.

Faculty also form groups with the students of the class (through mobile apps like Whatsapp) and share the necessary course materials like course lecture notes, assignment topics, course schedules, question bank etc. This also forms a very convenient, interactive and fast method of communication. Students can also message the faculty individually and clarify their doubts. Students are encouraged to attend technical webinars, to gain more knowledge in subjects. E-journals can be accessed in our digital library, which boosts the confidence of the students in publishing and presenting a paper in intra and inter level symposiums, and also in National/International conferences.

The placement cell is ICT enabled by means of which students can be given placement training programs by the industrial experts. Model online exams such as www.testseries.edugorilla.com/, TCS Codevista are conducted which help to equip the students for placements.

File Description	Document	
Upload any additional information	View Document	
Provide link for webpage describing the ICT enabled tools for effective teaching-learning process	View Document	

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

Response: 17:1

2.3.3.1 Number of mentors

Response: 25

File Description	Document
Upload year wise, number of students enrolled and full time teachers on roll.	View Document
mentor/mentee ratio	View Document
Circulars pertaining to assigning mentors to mentees	View Document

## 2.4 Teacher Profile and Quality

2.4.1 Average percentage of full time teachers against sanctioned posts during the last five years

Response: 97.29

File Description	Document
Year wise full time teachers and sanctioned posts for 5years(Data Template)	View Document
List of the faculty members authenticated by the Head of HEI	View Document

2.4.2 Average percentage of full time teachers with Ph. D. / D.M. / M.Ch. / D.N.B Superspeciality / D.Sc. / D.Litt. during the last five years (consider only highest degree for count)

Response: 8.81

2.4.2.1 Number of full time teachers with *Ph. D. / D.M. / M.Ch. / D.N.B Superspeciality / D.Sc. / D.Litt.* year wise during the last five years

2020-21	2019-20	2018-19	2017-18	2016-17
7	8	11	9	9

File Description	Document
List of number of full time teachers with Ph. D. / D.M. / M.Ch. / D.N.B Superspeciality / D.Sc. / D.Litt. and number of full time teachers for 5 years (Data Template)	View Document
Any additional information	View Document

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

Response: 4.48

#### 2.4.3.1 Total experience of full-time teachers

Response: 349.27

File Description	Document
List of Teachers including their PAN, designation, dept and experience details(Data Template)	View Document
Any additional information	View Document

## **2.5 Evaluation Process and Reforms**

#### 2.5.1 Mechanism of internal assessment is transparent and robust in terms of frequency and mode

#### **Response:**

The college has an exclusive Examination cell headed by a Convener for overseeing the conduct of all the internal and external examinations. The Convener is assisted by a team consisting of one faculty member from each department (Department Coordinator) and supporting staff members.

The institution develops academic calendar based on academic schedule provided for the affiliated colleges by Anna University, Chennai. It is prepared at the beginning of each semester in line with the University's calendar consisting of various curricular, extra and co-curricular activities. The dates of Internal Assessment Test -1 (IAT-1), Internal Assessment Test - 2 (IAT-2) and Model examinations are mentioned in the academic calendar. Detailed Examination Schedule is announced in advance to the students through Exam cell. The students are evaluated based on their performance in the Internal Assessments.

The Concerned Head of the department with the help of Exam cell members circulate the internal assessment time table. The Exam cell members collect two sets of question papers from the course handling faculty, preparing and displaying the seating plan and invigilation duties for the faculty.

The answer scripts are evaluated in a central valuation hall in the college. The answer scripts are evaluated by another faculty (not by the subject teacher) in each department to ensure transparent and unbiased evaluation. The faculty members evaluate the answer scripts immediately after the tests and the evaluated answer scripts are distributed to the students within two days of the conduct of examination.

It is a practice of the college to show internal examination answer booklets after evaluation to the students in the class for self-evaluation. Students are free to interact with the teacher to resolve grievances if any, regarding the assessment. By adopting the criteria as per the direction of affiliated colleges complete transparency is maintained in the system of internal assessment which enhances the bonding between faculty members and the students. The internal marks for each course based on the assessment is computed and entered in the Anna University Web portal as per the schedule given by the university. The students have the provision to view their marks in the University portal using their login credentials.

The internal evaluation of theory courses is planned in the following way:

INTERNAL ASSESSMENT TEST (IAT)	PORTIONS	EVALUATION PROCESS	MAXIMUM MARKS
IAT-1	UNIT I & II	Internal evaluation	50(Converted to 100)
IAT-2	UNIT III & IV	Internal evaluation	50 (Converted to 100)
MODEL EXAM	ALL 5 UNITS	Internal evaluation	100

For laboratory courses, the performance of students is assessed based on their performance in the regular practical sessions and model practical examination. For final year project work the performance of students

is assessed based on project reviews conducted twice in a month, Model project review and project demonstration. The Internal examination system thus implemented in the Institute has total transparency.

File Description	Document
Any additional information	View Document
Link for additional information	View Document

#### **2.5.2** Mechanism to deal with internal/external examination related grievances is transparent, timebound and efficient

#### **Response:**

The institute is having a well-structured mechanism to address examination related grievances in an efficient manner which is transparent and time-bound, as enumerated below.

The institution has an Examination cell headed by a Convener to deal with all examination related activities. The internal assessment examinations timetable is prepared as per the academic calendar provided by the Institution. The schedule and the timetable are circulated to all the departments and students prior to the commencement of examination. The timetable is also displayed on the notice board of the respective classrooms prior to the start of each examination. The answer keys for the respective question papers are prepared by the faculty.

After the test papers have been evaluated, the answer scripts of all Internal Assessments are shown to the students after evaluation. If they come across any doubts, clarification is given which enables them to do better in the future. The checked copies of the class tests are discussed with the students in the classes and in case of any problem, the subject teacher tries to resolve the same. However, if the grievance remains unresolved, the student can approach the HOD for further clarifications. The HOD will address the issue. Result analysis is prepared for each assessment examination and submitted to the Principal.

If a student is absent for a test for genuine reasons, he/she is given a chance to take up the test later on, after getting permission from the Principal through the HOD. If a student happens to be On Duty on the day of the test or examination, he / she is given an opportunity to take up a retest on a later date with a different question paper.

The end semester examinations are conducted and controlled by the Affiliating University. If any students have any grievances, it is communicated to the Controller of Examinations of the University through the Head of the Institution. If there are out of syllabus questions in the end semester question paper, then a feedback is given to the University through the proper channel by the head of the institution.

The grievances of the students in evaluation of end semester examination papers are addressed as per

university procedures. If a student thinks he/she has been awarded lower grades, then he/she can obtain photocopies of the evaluated answer scripts by applying for re-evaluation to the university. The University sends a scanned copy of the answer script to the college exam cell which is evaluated by the concerned faculty. If the faculty thinks that the student has done well, then the faculty recommends the answer script for revaluation.

Any grievances raised by the students before appearing in the university examination related to Hall Ticket etc. is dealt by Examination Cell in close coordination with the University.

File Description	Document
Any additional information	View Document

## 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.

#### **Response:**

The Institution offers 5 Under Graduate Programmes . The Programmes offered are listed below:

#### **UG Programmes:**

Programme Name	
Civil Engineering	
Computer Science and Engineering	
Electronics and Communication Engineering	
Electrical and Electronics Engineering	
Mechanical Engineering	

- AICTE Programme outcomes are followed
- Programme Outcomes are framed in consultation with Industrial Experts and Academicians from leading Institution.
- Course Outcomes are prescribed by Anna University for affiliated colleges in the syllabus itself. Apart from that each subject teacher specifies COs of each course.
- COs are given to the students and explained on the commencement of classes in each semester.

#### **DISSEMINATION:**

The Programme Outcomes (POs) and course outcomes (COs) of all the programmes are widely propagated and published through various means such as display and / or communication specified hereunder.

- College Website
- Rooms of HoDs
- Class rooms

• Notice boards

File Description	Document
Upload COs for all Programmes (exemplars from Glossary)	View Document
Past link for Additional information	View Document

#### 2.6.2 Attainment of programme outcomes and course outcomes are evaluated by the institution.

#### **Response:**

Institution evaluates the attainment of PO and COs through internal & external assessments.

#### Attainment of Course Outcomes (CO)

- The attainment of course outcomes is based upon the performance of the students in continuous assessment tests / assignments and final examinations.
- The questions that are used in assessments point to significant course outcomes.
- The performance of students is a measure of the achievement of course outcomes which are available in the course plans.
- Laboratory classes measure outcomes through the preparations of the students for demonstration and carrying out of experiments and reporting of significant findings.
- The internal assessments contribute to the evaluation of achievement of COs tested through various mode

#### The following methodology is used to measure the attainment of course outcomes.

- The attainment levels for courses are set based on the previous performance.
- Setting the three attainment levels helps to determine the extent of attainment of each course outcome against the set target.
- The attainment is measured in terms of the actual percentage of students getting the set percentage of marks or more.

Attainment of CO is measured based on the following:

For Theory subjects:

1. Internal Evaluation (weightage 30%)

Continuous internal assessment

Assignments

2. External Evaluation (weightage 70%)

University end semester theory examination

For Practical Subjects:

1. Internal Evaluation (weightage 40%)

Lab performance

Practical continuous assessment

2. External Evaluation (weightage 60%)

#### **Tutorials / Assignment**

Tutorials and assignment are completely framed based upon the bloom's taxonomy and course outcomes. Assignments are evaluated and marks are considered for the continuous assessment tests.

#### **Project Work / Seminar**

- A three member review committee has been set up for the continuous evaluation project.
- Each review process is evaluated based upon the outcomes of the project.

#### Measuring COs attained through End semester Examinations

The number of students graduating in the stipulated time is an indicator of the attainment of COs of various courses. Attainment of CO is measured using the number of students (as a percentage) who score grade points set for various courses in the Examinations in a given course.

#### **Measuring CO attainment**

Target may be stated in terms of percentage of students getting more than class average marks or set by the programme in each of the associated COs in the assessment instruments (Term Tests, Model Examinations, Assessments, Mini Projects, reports and presentations as mapped with the COs).

#### **Attainment of Programme Outcomes**

- At the end of the programme, the POs are computed using the CO computation value of the entire COs that are mapped to a PO and through Exit Survey.
- The PO computations are done using the weighted average of the entire COs that are mapped to that PO. The Exit survey questions are framed by the department to indirectly measure the POs.

• After the computation of POs, a thorough analysis on these attainment levels is done by the department. This analysis includes finding the weak areas towards the attainment of POs and a detailed plan of action of various events which help in the further attainment of the POs.

File Description	Document
Upload any additional information	View Document

#### 2.6.3 Average pass percentage of Students during last five years

#### Response: 49.12

# 2.6.3.1 Number of final year students who passed the university examination year-wise during the last five years

2020-2	1 2019	-20 2018-19	2017-18	2016-17	
116	37	86	112	255	

# 2.6.3.2 Number of final year students who appeared for the university examination year-wise during the last five years

2020-21	2019-20	2018-19	2017-18	2016-17
137	214	222	291	384

File Description	Document
Upload list of Programmes and number of students passed and appeared in the final year examination (Data Template)	View Document
Upload any additional information	View Document

#### 2.7 Student Satisfaction Survey

2.7.1 Online student satisfaction survey regarding teaching learning process

#### **Response:**

File Description	Document
Upload database of all currently enrolled students (Data Template)	View Document

# **Criterion 3 - 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, Chairs in the institution during the last five years (INR in Lakhs)

#### Response: 0.15

3.1.1.1 Total Grants from Government and non-governmental agencies for research projects , endowments, Chairs in the institution during the last five years (INR in Lakhs)

2020-21	2019-20	2018-19	2017-18	2016-17
0	0	0	0	0.15

File Description	Document
List of endowments / projects with details of grants	View Document
e-copies of the grant award letters for sponsored research projects / endowments	View Document
Any additional information	View Document

#### 3.1.2 Percentage of teachers recognized as research guides (latest completed academic year)

Response: 1.28

#### 3.1.2.1 Number of teachers recognized as research guides

Response: 1

File Description	Document
Institutional data in prescribed format	View Document
Any additional information	View Document

# **3.1.3** Percentage of departments having Research projects funded by government and non government agencies during the last five years

#### **Response:** 0

3.1.3.1 Number of departments having Research projects funded by government and nongovernment agencies during the last five years

2020-21	2019-20	2018-19	2017-18	2016-17
0	0	0	0	0
3.1.3.2 <b>Numbe</b>	r of departments of	ffering academic pr	ogrames	
2020-21	2019-20	2018-19	2017-18	2016-17
5	5	5	5	5
				1
File Descriptio	'n	I	Document	)

### **3.2 Innovation Ecosystem**

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

#### **Response:**

Shanmuganathan Engineering College has an enriching ecosystem that supports creativity and innovation. The college supports various research activities and skill-based projects by providing knowledge and latest technologies and infrastructure required in specific projects.

Students, under the supervision of faculty members engage in projects such as Re-use of energy to spread awareness about sustainability, Big data cloud computing, finger vein imaging and Predication of heart disease using mining techniques. Various skill-based activities are organized throughout the year to encourage students' scientific temperament and to develop their innovative and entrepreneurial skills.

Shanmuganathan Engineering College also supports a robust academic environment. From organizing educational programmes to undertaking research projects, there is routine engagement in production of new paradigms of knowledge and transference of the same.

The College bridges the gap between learning and research related activities. It organizes educational interactive sessions, workshops and seminars with eminent speakers deliberating on recent research and knowledge. It also informs and encourages faculty to publish their research in journals of national and international repute. The college has organized programmes on research methodology and intellectual property rights to promote a healthy and ethical research ecosystem.

File Description	Document
Upload any additional information	View Document

# **3.2.2** Number of workshops/seminars conducted on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship during the last five years

**Response:** 2

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

2020-21	2019-20	2018-19	2017-18	2016-17
0	0	0	1	1

File Description	Document
Report of the event	View Document
List of workshops/seminars during last 5 years	View Document

### **3.3 Research Publications and Awards**

3.3.1 Number of Ph.Ds registered per eligible teac	her during the last five years
Response: 5	
3.3.1.1 How many Ph.Ds registered per eligible tea	acher within last five years
Response: 5	이 가슴을 알려 들었다. 이 가슴을 가려는 들었다. 이 가슴을 알려들는 것이 가슴을 가져 들었다. 이 가슴을 알려들는 것이 가슴을 알려들는 것이 가슴을 알려들는 것이 가슴을 알려들는 것이 가슴을 가슴을 들었다.
3.3.1.2 Number of teachers recognized as guides of	luring the last five years
Response: 1	
File Description	Document
List of PhD scholars and their details like name of the guide , title of thesis, year of award etc	View Document
Any additional information	View Document

**3.3.2** Number of research papers per teachers in the Journals notified on UGC website during the last five years

**Response:** 0.12

3.3.2.1 Number of research papers in the Journals notified on UGC website during the last five years.

2020-21	2019-20	2018-19	2017-18	2016-17
0	1	0	4	7
File Description	Dn		Document	
-	n papers by title, auth	nor, department,	Document       View Document	

**3.3.3** Number of books and chapters in edited volumes/books published and papers published in national/ international conference proceedings per teacher during last five years

#### Response: 0.11

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 last five years

2020-21	2019-20	2018-19	2017-18	2016-17	
0	1	2	8	0	

File Description	Document
List books and chapters edited volumes/ books published	View Document
Any additional information	View Document

### **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 last five years.

#### **Response:**

Shanmuganathan Engineering College provides an environment conductive for the holistic development of students. Extension activities not only instill a sense of communal responsibility, but also our college boys and girls effectively participating towards important social issues like usage of plastics, creating awareness of drug usage, voters day and traffic safety. We organize various social outreach programmes to facilitate

our students with the concept and practice of social responsibility. Some extension activities organized are given below:

- Awareness program anti ragging
- Air-men group-x (technical awareness programme)
- Sec fest '17, 18, 19
- Science expo '18 , 19 , 20
- Saathikalam vaanga
- Valluvar peravai
- Voters day awareness rally
- Yoga training
- COVID 19 (Corona virus awareness programme)

#### Students Impact:

These experiences have awakened human values to our students. They have been trained to respond quickly whenever there is a need. They have shown great initiative both in active situations like flood relief and passive ones like traffic safety, voter day, etc., and maintained self discipline and brotherhood in the campus and also being great role model in the society.

File Description	Document
Upload any additional information	View Document

# **3.4.2** Number of awards and recognitions received for extension activities from government/ government recognised bodies during the last five years

**Response:** 3

3.4.2.1 Total number of awards and recognition received for extension activities from Government/ Government recognised bodies year-wise during the last five years.

2020-21	2019-20	2018-19	2017-18	2016-17	
0	2	1	0	0	
			,		
File Descriptio	on		Document		
-	on ands for extension act	tivities in last 5	Document       View Document		

#### 3.4.3 Number of extension and outreach programs conducted by the institution through

NSS/NCC/Red cross/YRC etc., during the last five years (including Government initiated programs such as Swachh Bharat, Aids Awareness, Gender Issue, etc. and those organised in collaboration with industry, community and NGOs)

#### Response: 11

3.4.3.1 Number of extension and outreached Programmes conducted in collaboration with industry, community and Non- Government Organizations through NSS/ NCC/ Red Cross/ YRC etc., year-wise during the last five years

2020-21	2019-20	2018-19	2017-18	2016-17
1	1	5	2	2

File Description	Document
Reports of the event organized	View Document
Number of extension and outreach Programmes conducted with industry, community etc for the last five years	View Document

**3.4.4** Average percentage of students participating in extension activities at **3.4.3**. above during last five years

Response: 36.74

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 last five years

2020-21	2019-20	2018-19		2017-18	2016-17	
2	506	372		170	100	
Ella Danada d'a			D			
File Descriptio	on		Docum	nent		
File Description				nent Document		

### **3.5** Collaboration

3.5.1 Number of Collaborative activities for research, Faculty exchange, Student exchange/

#### internship per year

**Response:** 1

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

2020-21	2019-20	2018-19	2017-18	2016-17
0	0	1	0	0

File Description	Document
e-copies of related Document	View Document
Details of Collaborative activities with institutions/industries for research, Faculty exchange, Student exchange/ internship	View Document

# **3.5.2** Number of functional MoUs with institutions, other universities, industries, corporate houses etc. during the last five years

**Response:** 3

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

2020-21	2019-20	2018-19	2017-18	2016-17
0	0	1	1	1

File Description	Document
e-Copies of the MoUs with institution/ industry/corporate houses	View Document
Details of functional MoUs with institutions of national, international importance, other universities etc during the last five years	View Document

# **Criterion 4 - 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.

**Response:** 

### **Response:**

The Institute adheres the norms laid by AICTE and Anna University for creating and enhancing the infrastructure facilities for effective teaching and learning. The Institute has sufficient classrooms, seminarhalls, various department laboratories, auditorium, library, and internet facility of 100 Mbps including Wi-Fi. The Institution is also furnished with a Smart Classroom. The entire ambience of the college is clean and fresh. All the infrastructure facilities are provided with a vision to help students to develop their academics and career progression skills. Total area of our institution is 25.756 acres.

### **Classrooms:**

The college has 42 well-lit and ventilated classrooms with wide corridors. The size of each classrooms is spacious and well ventilated. Each department has ICT enabled classrooms with LCD projector and Wi-Fi connectivity for successful incorporation of technology in teaching with regular practices.

# Laboratories and computing equipment:

The College has exclusive Language laboratory attached with audio and video facilities for enhancing students to gain knowledge. Our institution has nine Computer laboratories with 405 computers out of which 382 are exclusively for students usage. All the computers are connected through LAN or Wi-Fi with 100Mbps internet speed to share and access knowledge resources like NPTEL, YouTube etc. The computers have various operating systems like Windows – 10, Windows-XP, Windows-7, Ubuntu.

The Institution has sufficient number of drawing halls with drawing tables for the access of students. Our Institution boasts of huge, commodious and fully air-conditioned seminar hall with a seating capacity of 120 people each, an Auditorium having a seating capacity of 800 people and an open auditorium to conduct various curricular and co-curricular events. The College ICT facility includes projectors, wireless microphones, sound systems, public addressing system, desktop recorder and video recorder with internet facility to conduct lectures, seminars, webinars, conferences, guest lectures, and workshops.

### Library

The library acts as one of the main learning source centres of the institution and provides services and facilities to meet the requirements of the institute's teaching, training, research and consultancy programmes. The library is constantly updated with the latest Magazines, National and International journals, Reference books and other material at regular periods. Core reference collection of various books

are also available for all students to upgrade their knowledge. The Institution has subscribed to DELNET to access online Journal and E-Books. DELNET is very helpful for accessing Journals and Magazines by the faculty members and students. The library is well equipped.

File Description	Document
Upload any additional information	View Document

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

**Response:** 

## **Response:**

Shanmuganathan Engineering College encourages students to participate in various extra-curricular activities and provides facilities to take care of physical well being and provide entertainment outlet. A team of faculty members and students are involved in cultural, sports and extra-curricular activities of the college. Our institution is facilitated with various indoor and outdoor games which provides students to enrich their sportsmanship. This aids the students to involve themselves in Various sports activities. The Students can refresh themselves by utilizing the Gym facility.

### **Outdoor and Indoor games**

The institute has a total area of 16,800 sq. meters of playground with basketball, ball badminton, football, cricket, kho-kho, Kabaddi, handball, hockey, and volleyball facilities. Our students have bagged good winning records at intercollegiate and Zonal levels. The institute is well equipped and spacious enough to conduct various indoor games like chess, carom and table tennis.

#### Gym

For all-round development of the students, there is fully equipped gym - fitness zone containing all modern equipment. This area (comprising nearly 100 sq. meters) has a range of equipment. double bar, Back Hyper Extension, Fore Arm Extension, Leverage squat/calf raise machine, Bicep cart, fore Arm extension, Pull up stand, Bench press, Abs machine etc.,

### **Cultural Activities**

The institution boasts of huge, commodious with a seating capacity of **800** people. It is used for conducting seminars, workshops, conferences, cultural events/activities and co- curricular activities. The college has a committee for conducting cultural activities. This committee along with staff and students of the college organizes an annual cultural function. The aim of this cultural event is to provide a platform for students to showcase their talents and organizational skills. The students organize and participate in many

cultural activities like group Dance, Skits, MIME, Debate, Face Painting, Drawing etc., during the Annual day. The college organizes Annual day function every year where the students participate in many cultural activities with zeal and enthusiasm. To broaden the horizons of the students, they are encouraged to participate in several inter-collegiate events.

### Health care

Medical facility is available in the campus for the benefit of the students and staff. A separate dispensary under the supervision of a qualified physician exists in the campus.

File Description	Document
Upload any additional information	View Document

# **4.1.3** Percentage of classrooms and seminar halls with ICT- enabled facilities such as smart class, LMS, etc. (*Data for the latest completed academic year*)

#### Response: 13.21

4.1.3.1 Number of classrooms and seminar halls with ICT facilities

Response: 7

File Description	Document
Upload Number of classrooms and seminar halls with ICT enabled facilities (Data Template)	View Document
Upload any additional information	View Document

# **4.1.4** Average percentage of expenditure, excluding salary for infrastructure augmentation during last five years(INR in Lakhs)

Response: 35.44

# 4.1.4.1 Expenditure for infrastructure augmentation, excluding salary year-wise during last five years (INR in lakhs)

20	020-21	2019-20	2018-19	2017-18	2016-17
3	6.73	143.38	78.59	161.05	178.82

File Description	Document
Upload Details of budget allocation, excluding salary during the last five years (Data Template)	View Document
Upload audited utilization statements	View Document

### 4.2 Library as a Learning Resource

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

#### **Response:**

#### **About ILMS - Library Automation Software**

The campus has a spacious central library. The central library has various text books, reference books, eBooks, journals, magazines, e-Journals, project reports and NPTEL video related to engineering and allied subjects. The library is fully automated through Integrated Library Management System (ILMS) named Rovan software. The Library Management System consists of New Resource Entry Catalogue, Search Stock Verification, Accession Register, New Arrivals List Year wise / Subject wise / Department wise Statistics Missing Accounts Number, details of stock Verification, Loss Digital Library reports etc.

It also has the facilities of Staff, Student Data Promotion Privilege Setting Issue, Return or Renew reservation, Over Due Charge, Fine, Loss, Recovery Binding, Gate Register, No Dues Certificate Resource Analysis Member Analysis etc.

The software also has Subscription to Management Issue Arrival Schedule, New Issue Entry Articles, Non Receipt of Issues Reminders, Back Volume Management etc. using the software the search can be done by choosing Title / Author / Subject / Keywords / accounts. No. / Call No. / Department. etc. Boolean Operators, Wild Card Matching are available. The software also has Budget Receipt, Budget Allocation Budget, Utilization Order / Receipt Payment Purchase, Statement Supplier wise Statement and also has users, log in information and backup details.

File Description	Document
Upload any additional information	View Document

#### 4.2.2 The institution has subscription for the following e-resources

1.e-journals
 2.e-ShodhSindhu
 3.Shodhganga Membership
 4.e-books
 5.Databases
 6.Remote access to e-resources

Kesponse. D. Thiy 5 of the ubove		
File Description	Document	
Upload any additional information	View Document	
Details of subscriptions like e-journals, e- ShodhSindhu, Shodhganga Membership , Remote access to library resources, Web interface etc (Data Template)	View Document	

#### **Response:** B. Any 3 of the above

#### 4.2.3 Average annual expenditure for purchase of books/e-books and subscription to journals/ejournals during the last five years (INR in Lakhs)

Response: 4.92

# 4.2.3.1 Annual expenditure of purchase of books/e-books and subscription to journals/e- journals year wise during last five years (INR in Lakhs)

2020-21	2019-20	2018-19	2017-18	2016-17
2.697	6.217	7.687	2.957	5.04

File Description	Document
Details of annual expenditure for purchase of books/e-books and journals/e- journals during the last five years (Data Template)	View Document
Audited statements of accounts	View Document

# **4.2.4** Percentage per day usage of library by teachers and students (foot falls and login data for online access) during the last completed academic year

Response: 2.75

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

Response: 14

File Description	Document
Details of library usage by teachers and students	View Document

### 4.3 IT Infrastructure

4.3.1 Institution frequently updates its IT facilities including Wi-Fi

### **Response:**

The College upgrades its IT infrastructure regularly to meet the current technical requirements. The college has very strong IT infrastructure and fulfills the norms of AICTE and Anna University.

The College was previously availing internet service from BSNL with 50Mbps band width and currently it is upgraded to 100 Mbps band width. WiFi connectivity of 100 Mbps is maintained annually. Wi-Fi connectivity of 100 Mbps is provided in the administrative and academic areas. Additionally Ethernet ports are provided all over the campus for laptops/devices in need of internet connectivity. V-LAN network facility is implemented to connect all the systems with internet.

There are a total of 405 computers available in the college premises. The staff rooms are either provided with LAN or Wi-Fi facility to enhance the teaching - learning process. Wi-Fi facility is also provided for both boys and girls hostels for enhancing their skills through online courses, projects and for downloading extra study materials.

The college has well established language laboratory to enhance communication skills of students., hands on training, online competitive exams, etc. For uninterrupted computing, UPS is available in all computer laboratories.

File Description	Document
Upload any additional information	View Document

#### 4.3.2 Student - Computer ratio (Data for the latest completed academic year)

Response: 1:1

#### 4.3.3 Bandwidth of internet connection in the Institution

**Response:** A. ?50 MBPS

File Description	Document
Upload any additional Information	View Document
Details of available bandwidth of internet connection in the Institution	View Document

### 4.4 Maintenance of Campus Infrastructure

**4.4.1** Average percentage of expenditure incurred on maintenance of infrastructure (physical and academic support facilities) excluding salary component during the last five years(INR in Lakhs)

Response: 35.44

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

2020-21	2019-20	2018-19	2017-18	2016-17
36.73	143.38	78.59	161.05	178.87

File Description	Document
Details about assigned budget and expenditure on physical facilities and academic support facilities (Data Templates)	View Document
Audited statements of accounts	View Document

# **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.

#### **Response:**

#### Utilization and Maintenance of Physical, Sports Complex and Support Facilities

The campus holds well established standard systems and procedures for maintaining the physical, academic and support facilities such as maintenance of buildings, laboratories, classrooms, library, sports complex, computers, etc. The Estate manager is responsible for maintaining facilities such as buildings, transport, electrical, housekeeping, gardening etc. Regular cleaning of college floors, classrooms, laboratories, equipment and restrooms are being done by the housekeeping team. Stock verification of all laboratories and other facilities is done at the end of every year by the staff members from Head of the department and the report is submitted to the Principal.

• Separate complaint registers are maintained for various services and are attended to on a daily basis.

#### Maintenance of laboratory equipment

Periodical check-up of equipment is carried out as per schedule by the laboratory in-charge. The measuring instruments are calibrated regularly. In addition, maintenance is being done weekly, monthly and yearly and the respective registers are maintained in the laboratories. As per the requirement, minor repairs are carried out by the laboratory in-charge or faculty members.

Major repairs for all laboratory equipment are outsourced by following the procedure:

1. The service request is forwarded to the Head of the Department through laboratory in-charge and Head of the Department reports it to the Principal.

- 2. After approval, Quotation for service is called for and the recommended service provider is identified and forwarded to the Principal.
- 3. After approval, the service is carried out in the presence of laboratory in-charge.
- 4. After service, the work completion statement and bills are submitted to the accounts department.

#### **Maintenance of Computer Laboratories**

Maintenance of computers is taken care by an in-house IT admin team. Preventive maintenance and breakdown maintenance procedure are followed. Installation of antivirus and firewall ensures that the software and system are secured. A weekly status check on the hardware and software condition of the machines is undertaken and the same is noted in a maintenance register. Any failure due to SMPS problem or boot loop is recorded in a complaint register. If the problem is minor, the technical support staff of the laboratory will rectify it. For major failures, support from the vendor is taken. Periodic maintenance is done by regular cleaning of the laboratories, software updates, and antivirus updates.

#### Library maintenance

Library maintenance involves continuous monitoring and verification of the stock, displaying of new material on the display racks and arrangement of the books on the racks. The book materials are cleaned at periodic intervals to reduce the damage caused by dust, insects and pest infestation.

#### Sports infrastructure maintenance

Indoor and outdoor sports infrastructure facilities are properly maintained by the markers throughout the year. Playfield and gym equipment are also maintained regularly.

#### Gymnasium and Sports complex maintenance

Separate open ground for badminton, football, volleyball, basketball and cricket are made available for all the students and well equipped gymnasium is maintained for all students. The maintenance of sports equipment and playgrounds are maintained by a physical director and his team members.

#### Air-conditioner maintenance

The regular maintenance of filters and gas filling for air conditioners in the campus are serviced periodically or whenever required by the in-house maintenance team.

#### Housekeeping maintenance

Cleaning and mopping of classrooms, laboratories, library, seminar halls, auditorium, mess halls, hostels, administrative block and placement block are carried out by housekeeping team of the college.

File 1	Description
--------	-------------

Upload any additional information

Document

View Document

# **Criterion 5 - Student Support and Progression**

#### **5.1 Student Support**

**5.1.1** Average percentage of students benefited by scholarships and freeships provided by the Government during last five years

#### **Response:** 84.72

5.1.1.1 Number of students benefited by scholarships and freeships provided by the Government year-wise during last five years

2020-21	2019-20	2018-19	2017-18	2016-17
357	453	542	682	824

File Description	Document
upload self attested letter with the list of students sanctioned scholarship	View Document
Upload any additional information Average percentage of students benefited by scholarships and freeships provided by the Government during the last five years (Data Template)	View Document

# **5.1.2** Average percentage of students benefitted by scholarships, freeships etc. provided by the institution / non- government agencies during the last five years

Response: 14.33

5.1.2.1 Total number of students benefited by scholarships, freeships, etc provided by the institution / non- government agencies year-wise during last five years

2020-21	2019-20	2018-19	2017-18	2016-17
67	97	103	79	116

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

5.1.3 Capacity building and skills enhancement initiatives taken by the institution include the following

#### 1.Soft skills

2. Language and communication skills

3. Life skills (Yoga, physical fitness, health and hygiene)

#### 4.ICT/computing skills

**Response:** B. 3 of the above

File Description	Document
Details of capability building and skills enhancement initiatives (Data Template)	View Document
Link to Institutional website	View Document

# **5.1.4** Average percentage of students benefitted by guidance for competitive examinations and career counselling offered by the Institution during the last five years

Response: 8.77

# 5.1.4.1 Number of students benefitted by guidance for competitive examinations and career counselling offered by the institution year wise during last five years

2020-21	2019-20	2018-19	2017-18	2016-17
63	34	68	32	79

File Description	Document
Number of students benefited by guidance for competitive examinations and career counselling during the last five years	<u>View Document</u>
Any additional information	View Document

**5.1.5** The Institution has a transparent mechanism for timely redressal of student grievances including sexual harassment and ragging cases

- **1. Implementation of guidelines of statutory/regulatory bodies**
- 2. Organisation wide awareness and undertakings on policies with zero tolerance
- 3. Mechanisms for submission of online/offline students' grievances
- 4. Timely redressal of the grievances through appropriate committees

<b>Response:</b> A. All of the above		
File Description	Document	
Upload any additional information	View Document	
Minutes of the meetings of student redressal committee, prevention of sexual harassment committee and Anti Ragging committee	View Document	
Details of student grievances including sexual harassment and ragging cases	View Document	

# 5.2 Student Progression

5.2.1 Average percentage of placement of outgoing students during the last five years

#### Response: 56.87

5.2.1.1 Number of outgoing students placed year - wise during the last five years.

2020-21	2019-20	2018-19	2017-18	2016-17	
63	34	68	32	79	

File Description	Document
Upload any additional information	View Document
Self attested list of students placed	View Document
Details of student placement during the last five years (Data Template)	View Document

#### 5.2.2 Average percentage of students progressing to higher education during the last five years

#### Response: 17.95

#### 5.2.2.1 Number of outgoing student progression to higher education during last five years

Response: 21

File Description	Document
Upload supporting data for student/alumni	View Document
Details of student progression to higher education (Data Template)	View Document

5.2.3 Average percentage of students qualifying in state/national/international level examinations during the last five years (eg: IIT-JAM/CLAT/ NET/SLET/GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/State government examinations, etc.)

#### Response: 1.54

# 5.2.3.1 Number of students qualifying in state/ national/ international level examinations (eg: IIT/JAM/ NET/ SLET/ GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/ State government examinations, *etc.*)) year-wise during last five years

2020-21	2019-20	2018-19	2017-18	2016-17
0	1	0	0	0

# 5.2.3.2 Number of students appearing in state/ national/ international level examinations (eg: JAM/CLAT/NET/ SLET/ GATE/ GMAT/CAT,GRE/ TOFEL/ Civil Services/ State government examinations) year-wise during last five years

2020-21	2019-20	2018-19	2017-18	2016-17
8	13	13	0	0

File Description	Document
Upload supporting data for the same	View Document
Number of students qualifying in state/ national/ international level examinations during the last five years (Data Template)	View Document
Any additional information	View Document

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

5.3.1 Number of awards/medals won by students for outstanding performance in sports/cultural activities at inter-university/state/national / international level (award for a team event should be counted as one) during the last five years.

#### **Response:** 2

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) year-wise during the last five years.

2020-21	2019-20	2018-19	2017-18	2016-17
0	0	1	1	0

File Description	Document
Number of awards/medals for outstanding performance in sports/cultural activities at university/state/ national/international level during the last five year	View Document
e-copies of award letters and certificates	View Document
Any additional information	View Document

#### **5.3.2** Institution facilitates students' representation and engagement in various administrative, cocurricular and extracurricular activities following duly established processes and norms (student council, students representation on various bodies)

#### **Response:**

SEC focuses on improving students' academic and administrative skills by involving them in various administrative and academic activities. Student representatives are also included in the organization of placement, sports activities, and women's empowerment cell.

The students participate as members in various cells and clubs in the college such as National Service Scheme, Red Ribbon Club, Youth Red Cross club, Yoga club, Consumer Club.

Students actively participate in the academic activities organized by various departments through various professional chapters of the institute. The main objective of IQAC is to develop a system for sensible, consistent and catalytic action to improve the academic and administrative performance. The Grievances and Redressal committee, Anti-ragging committee and Sexual Harassment redressal committee of SEC has the motive of solving the problems among the students and faculty members.

Our college NSS unit contains students from all the departments under the guidance of the NSS Coordinator. NSS unit undertakes activities such as blood donation camps, road safety awareness, AIDS awareness, election awareness, health awareness, environmental awareness, and tree plantation programs, etc., NSS also visits local villages and conduct cleaning programs.

Women's empowerment cell organizes various programs on health awareness for women and programs on professional development in uplifting their social status in society. Along with sexual harassment cell it focuses on gender equity issues on the campus.

Every year, a Technical Association committee is formed comprising of three student representatives from each department. From the Committee framed one student is being selected as Secretary in each department. The student committee plays a vital role in departmental activities such as organizing symposiums, seminars, competitions, conferences and workshops. The council members and all the other students deliberately involve in their department activities.

The students involve themselves in events such as Teachers day, Science day, Engineers day, College day, Independence Day, Republic day and various club activities. Each club has several students who take on leadership roles and organize the events and get tremendous exposure. The student representatives also actively participate in Sports committee, cultural committee, etc. The college provides necessary facilities for developing technical skills, updating knowledge, personality development and service to the society through various Associations and Societies. There is a staff advisor to guide the students in the smooth and effective functioning of the Associations

File Description	Document
Upload any additional information	View Document
Paste link for additional information	View Document

# **5.3.3** Average number of sports and cultural events/competitions in which students of the Institution participated during last five years (organised by the institution/other institutions)

#### Response: 19.8

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

2020-21	2019-20	2018-19	2017-18	2016-17
5	14	17	39	24

File Description	Document
Upload any additional information	View Document
Number of sports and cultural events/competitions in which students of the Institution participated during last five years (organised by the institution/other institutions (Data Template)	View Document

#### 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

#### **Response:**

Shanmuganathan Engineering College has come a long way with 16 batches of proud alumni, guided by its motto Service and Excellence, and climbed great heights, in a short time since its inception. College has some of the best infrastructural facilities, qualified faculty members, and an organized administration. The alumnus plays a significant role in strengthening our institution. The main objective of SEC is to enroll all alumni as members of the association facilitating active participation in the activities, events and initiatives of the Institution, where the alumni from different branches of the undergraduate programs share their views and give suggestions for the betterment of their junior students & institution/ department.

Alumni are invited to our institution to deliver Guest lectures and seminars to the students in their areas of expertise and motivate the young minds. Successful entrepreneurs from the alumnus have shared their success stories on various occasions in the Institute. The SEC alumni association strives to

- 1. Improve the prominence of the SEC Alumni Association
- 2. Elevate Alumni recognition and engagement
- 3. Maintain an up-to-date Alumni database
- 4. Build a strong working relationship between the Alumni and the students.

Alumni offers feedback on courses and curriculum to promote campus placements. SEC alumni are truly the off-campus brand ambassadors. The Institution has also received excellent feedback from the employers of our alumni. The association provides a bridge for the alumni to connect with the students and interact with them.

www.facebook.com/shanmuganathanengineeringcollege offers a platform for the alumni to interact with their peers and maintain a good relationship with the Institution. Along with this, the association can also be contacted via Email: secalumni2020@gmail.com

All major activities and events of the college and alumni achievement are posted regularly on these pages and the portal provides a window for both the students and the alumni to have up- to-date information about their alumni body and the Institution respectively.

File Description	Document
Upload any additional information	View Document
Paste link for additional information	View Document

#### 5.4.2 Alumni contribution during the last five years (INR in lakhs)

**Response:** E. <1 Lakhs

File Description	Document	
Upload any additional information	View Document	
Link for any additional information	View Document	

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# **Criterion 6 - 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

#### **Response:**

The vision of the institute is to achieve excellence in technical education for the rural background students and to achieve this, the mission of the institute is well articulated.

The departments, in turn, have framed their vision and mission in tune with that of the institute. Based on the Vision and Mission of the institute and inputs from various stakeholders, the Quality Policy was drafted.

The BoG gives guidelines for appropriate governance to realize the vision. The top management provides effective academic leadership to the faculty, by setting goals and involving them in participative decision-making process not only to achieve the vision, mission and goals of the institute but also in building the organizational culture.

The institute's mission is to produce competent and responsible engineers and not mere graduates.

- Students are made ready to face the industry, head-on, by the way of industrial projects/industrial visits/ internships/ which expose them to recent industrial trends and to inculcate the spirit of learning. To motivate the students to pursue higher education, appear for competitive exams, and other value added programmes for their holistic development.
- Faculty continuously updates themselves and are equipped with skills to impart knowledge of the highest standards.
- Every effort with respect to the beginning of new programs, expansion of infrastructure, formulation and promulgating of strategy follow the bottom to top approach. The implementation process is further discussed with the Principal and Heads of the departments for execution.
- The perspective plans are prepared by the Principal in consultation with Department Heads and various committees and cells.

The institution ensures quality standards in teaching learning process, evaluation system and other related activities. The Principal assisted by HoDs, Administrative officers, In-charges and Coordinators of various cells/committees conducts various quality upgradation programmes in the institution.

- The Principal gathers the important issues from all the department HoDs and frame the agenda for the Meeting. Affirmed decisions are circulated to the management. The management ensures a smooth flow of information top down and bottom up paving way for good cooperation.
- The Head of the Department in turn distributes duties like Counselling, committee in-charge, Labin-Charge among the faculty. The college deputes the faculty members from all departments to conduct conferences, seminars, workshop, orientation programme, short term training programmes to strengthen their leadership qualities.
- The institution provides the faculty members different roles in various committees like Internal Quality Assurance, ISO, Examination, Placement, Grievance Redressal, Sports, Anti-ragging, Anti-

Sexual Harassment, etc. The outcome of the discussions in the committee/cell/ are noted and forwarded to the Head of the Institution who in turn discusses relevant matters with HoDs and if required submits to the Governing Council for ratification.

• The Institute has a perspective plan for development. It is developed by Principal with the help of HoD's of various departments under the guidance of Governing Council. Based on the academic schedule given by University academic calendar is prepared. The academic calendar includes the list of pre-planned programmes of various departments and examination schedules are prepared.

File Description	Document
Upload any additional information	View Document
Paste link for additional information	View Document

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

#### **Response:**

The Institution encourages and motivates the culture of decentralization and participative management. In the decentralized set up adopted in the Institution, the Principal, who is the academic & administrative head monitors the overall functioning and has powers for academic, administrative, financial issues for the growth of institute.

The Institute has decentralized its operations and has delegated authority at various levels to ensure good governance. The faculty members involve themselves in administrative roles and manage responsibilities. They are involved to participate through committees to manifest their administrative skills with professional responsibility and accountability and also guide student committee members to learn their leadership qualities. This ensures their insight in decision-making with regard to organizing academic, administrative, co-curricular and extra-curricular activities conducted in the course of the academic year.

Faculty members are given representation in various committees/cells and allowed to conduct various programs to showcase their abilities. They are entrusted with responsibility as coordinator and convener for organizing seminars/workshops/conferences/FDPs/and guest lectures and to organize industrial tours and to have collaboration with industry for academic benefit of students.

#### **Case study: Purchase of Laboratory Requirements**

The laboratories are upgraded to enhance the students' practical knowledge and to make them compete with the standard of the industry. The hardware and software equipment, consumables and spare parts are bought with the help of the faculty In-charge for the laboratory.

The Lab-in-charge and the Faculty of the particular laboratory request the requirements to the Head of the Department prior to the commencement of the semester. The Head of the Department organizes the purchase meeting with the faculty members of the concerned department who are aware of the requirements of the equipment in the laboratory.

The Head of the Department prepares the budget for the semester by taking the reference of the quotations. The Principal forwards the budget requisition given by the Heads of the Department to the management for approval. The process of approval takes place every semester. Once the approval is granted by the Management, the same will be communicated to the Heads of Department through the Principal. The faculty in-charge verifies the sorted quotations that are submitted by the department based on the requirements of the upcoming semester. Finally, they will approach the vendor to place the order.

It is apparent that the process of purchasing the lab requirements is initiated by the Faculty Incharge. Thereby, the Faculty In-charge of the Laboratory consults with the Head of the Department and decides on the specification and make/model of various equipment. There is no interference whatsoever from any of the authorities above the Head of the Department. The quotations are received from vendors decided by the department and comparative statements are presented to the purchase committee. Without compromising on quality and standard desired by the departments, the faculty in-charge will negotiate and place orders for the requirements. The management ratifies the decision taken by the HoD through the Principal which shows the participation of the management at the appropriate level.

File Description	Document	
Upload any additional information	View Document	
Paste link for additional information	View Document	

# 6.2 Strategy Development and Deployment

### 6.2.1 The institutional Strategic / Perspective plan is effectively deployed

#### **Response:**

The institution affiliated to the Anna University, Chennai has a premeditated plan for progress of the institution. The institutional plan is prepared in compliance to the guidelines issued by the AICTE from time to time for the successful conduct of the academic programmes.

The institute has a strategic plan which includes getting NBA accreditation, strengthening the campus facility, improving the teaching-learning process, providing Personality development program for the students, providing more Faculty Development Training programmes.

The strategic plan developed by the IQAC, approved by the Governing Body is adopted wherein the goals and action plans are aligned with the Institute's Vision and Mission. Governing Body discusses and executes developmental issues and best practices that positively impact teaching-learning process and corrective measures for performance improvement.

The quality of faculty members is enhanced by motivating them to attend programs like FDPs, Conferences, Seminars and Industry oriented programs outside. Creating an environment to access national and international journals through digital media. The tests conducted to the students to be designed to measure technical and critical thinking of skills. Special attention will be given for disadvantaged and rural students to increase transition rate.

Faculty members co-operate in the areas of student support, sharing of expertise acquired through different training programmes. Teaching departments encourage interdisciplinary classes during tutorial sessions by faculty of departments. Similarly, IQAC takes initiative in organizing programmes that enable faculty members share their experiences gained through training.

Special classes are arranged for students with rural background for improving their Communication Skills. Hostel accommodation is provided to boys and girls separately with all basic amenities. Plantation is done to make the entire campus green and pollution free.

Professional trainers visit our campus to train students of all the departments, semester wise. Students are divided into batches and all the batches are trained in various personality development programs like teamwork, communication skills, vocabulary and attitude beside technical knowledge.

The program gives students an insight into the corporate world and prepares them to apply the skills they learn during the various programs. Besides Soft skills, this program is also enhanced by the other two pillars for successful campus placements i.e. Aptitude Training and Technical training.

The Personality Development Program helps the students to overcome communication apprehension and to present any topic confidently and positively. It also educates them to manage time and to work as a team.

Roof top Solar panels on the buildings save energy and contribute to meet energy requirements of college. Required infrastructure is procured to encourage students participate in sports and games and to boost their morale through the guidance from Physical Director to take part at various levels.

File Description	Document	
Upload any additional information	View Document	
Paste link for additional information	View Document	

# 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.

#### **Response:**

Board of Management are the backbone of this institution. It holds the authority and responsibility to ensure the fulfilment of the institution's mission. They are also ultimately responsible for the policies of the institution.

Functions of the Governing Body:

The Institute is also managed by the Governing Body, a decision making body which steers direction of the institute in a progressive mode. The members of the GB discuss and decide policies and action plans for fulfilment of the vision of the institute.

Taking decisions or giving approval for decisions taken by sub committees regarding matters such as building construction, purchase of major equipment, applications for new courses/ additional intake, staff matters, faculty recruitment, major student welfare measures etc.

#### The Principal:

Responsible for the quality policy, formulate quality system, enforce implementation and adherence, monitor effectiveness, promote quality improvement in teaching, learning, evaluation and support systems. All academic activities of the institution including maintaining existing affiliation and recognition and promoting new affiliations and recognition for which the institution is deemed eligible. Preparation of the academic calendar, monitoring the progress of class work and directing student activity programs. Monitors admission, regular class works, placement activities, etc. Responsible for overall administration and academic function of the institution in keeping with policies of the college management.

#### Head of the Department:

Responsible for effective and systematic working of their departments. Making Timetable, ensuring adherence to the same, maintaining attendance of students and staff members, encouraging and employing innovating teaching aids and methods, conducting internal evaluation of students as per stipulations, maintaining the laboratories, current curriculum and syllabus as per the needs of changing priorities and recommending improvements for keeping abreast of the latest trends in knowledge and technology, studying results and feed back to evolve improved teaching systems. Promoting the interests of students in bringing out their talent and skills. Other members in the department assist HoD in the efficient discharge of all the above activities. Responsible for all the academic activities, co-curricular and extra-curricular activities of the concerned department.

#### Administrative Office:

Responsible for overall administration of the office. purchase activities, accounts and establishment activities. Also responsible for tuition fee, transport fee and student scholarships The office is responsible for maintaining the details of faculty members, non-teaching and supporting staff members.

#### Placement Coordinator:

The placement Coordinator is responsible for all the activities relating to the students' placement like training programmes, interacting with various companies, industries and corporate and organising drives.

#### Library in charge:

The Librarian maintains the documentations of books, journals, periodicals, newspapers, magazines & library materials. Librarian prepares a periodical requirement of books and journals based on the input from various departments and report to the Principal for any discrepancy.

#### Exam-Cell in charge:

Responsible for all registers and records concerning the examinations. Responsible for the conduct of examinations for theory and practical courses.

#### Physical Director:

In charge of sports and extracurricular activities in the college. Responsible for conduct of sports events in the institution.

Estate Manager:

Responsible for supervising the gardening and domestic services.

File Description     Document	
Upload any additional information	View Document
Link to Organogram of the Institution webpage	View Document
Paste link for additional information     View Document	

6.2.3 Implementation of e-governance in areas of o	peration
1. Administration 2. Finance and Accounts 3. Student Admission and Support 4. Examination Response: C. 2 of the above	
File Description	Document
Screen shots of user interfaces	View Document
Details of implementation of e-governance in areas	View Document

### **6.3 Faculty Empowerment Strategies**

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

#### **Response:**

The Institute puts forth all endeavours to support the professional development of its teaching and nonteaching staff which in turn impacts on Teaching Learning system of college. Staff members are encouraged to acquire the latest skills by attending orientation and refresher courses. The College regularly conducts Faculty development programs in various domains and state/national/international level seminars and conferences at the institute to enable the faculty get an opportunity to interact with experts from different fields.

Faculty are facilitated to participate in workshops to familiarize the staff members with any changes in

syllabus or new developments in the field of study. They are encouraged to attend seminar and conferences to know the rapid changes in technology and industry expectations. Experts from the industry and academia are called to address the staff. Monetary incentives are provided to staff members who complete their Ph.D.

The schemes such as PF is implemented for staff. Vacation leave, medical leave, maternity leave, casual leave are sanctioned to employees as per rules of college. Free transport for all non-teaching staff is offered. The salary is directly credited to the employee's bank account. Eligible Faculty who pursues Doctoral research and any other higher education are given On Duty for their study purpose. All staff are covered with Group insurance scheme.

The staff rooms are provided with the Wi-Fi facilities. Pure drinking water facility is provided. Computer and Internet facilities are made available to teaching and Non – teaching staff. CCTV Cameras for security purpose. Canteen facility. Adequate Space is provided for parking of vehicles. Free health Care for all teaching and non-teaching staff. Concession in the college fees for the wards of Employees. Advances against salary are given to the needy faculty.

Uniform is also being provided for lady teaching faculty, drivers, securities and scavengers. ATM facilities are available in the campus. The Bank of India which offers/provides to the employees of the college the loan facilities such as Personal Loan, Educational Loan, Housing Loan, Vehicle Loan etc. All staff both teaching and non-teaching staff can avail sports facilities to improve their physical fitness.

File Description	Document	
Upload any additional information	View Document	
Paste link for additional information	View Document	

**6.3.2** Average percentage of teachers provided with financial support to attend conferences/workshops and towards membership fee of professional bodies during the last five years

Response: 1.03

6.3.2.1 Number of teachers provided with financial support to attend conferences/workshops and towards membership fee of professional bodies year wise during the last five years

2020-21	2019-20	2018-19	2017-18	2016-17
4	0	0	0	0

File Description	Document
Upload any additional information	View Document
Details of teachers provided with financial support to attend conference, workshops etc during the last five years	View Document

**6.3.3** Average number of professional development /administrative training programs organized by the institution for teaching and non teaching staff during the last five years

**Response:** 3.4

6.3.3.1 Total number of professional development /administrative training Programmes organized by the institution for teaching and non teaching staff year-wise during the last five years

2020-21	2019-20	2018-19	2017-18	2016-17
2	1	2	7	5

File Description	Document
Upload any additional information	View Document
Details of professional development / administrative training Programmes organized by the University for teaching and non teaching staff	View Document

6.3.4 Average percentage of teachers undergoing online/ face-to-face Faculty Development Programmes (FDP)during the last five years (Professional Development Programmes, Orientation / Induction Programmes, Refresher Course, Short Term Course ).

Response: 19.88

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

2020-21	2019-20	2018-19	2017-18	2016-17
62	12	4	1	2

File Description	Document
Upload any additional information	View Document
Details of teachers attending professional development programmes during the last five years	View Document

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

#### **Response:**

Performance Appraisal System includes Self-Appraisal for both teaching and non-teaching staff. Performance of the teaching faculty in professional development activities is evaluated through their performance against important Academic aspects. Participation in various activities like seminar, workshop, FDP: Faculty Paper and Journal publications, Conferences attended, pursuing higher studies, Consultancy projects, Professional body Memberships, Value added courses, Resource person, Cocurricular & Extracurricular activities and Association activities are also considered for appraisal of faculty. Contribution towards Learning Resources Development at Institute, innovation in teaching, and efforts for Lab Work/Tutorials and University related work is also taken into account for faculty appraisal.

Parameters considered are students' feedback, Mentoring, punctuality, preparation, presentation skills, Management of discipline and control, subject knowledge and Approachability. It also involves the reviews and comments of the HoD, team work and contribution to the department, Instruction compliance, Commitment to the Department and Institution, mentoring ability and Organizational skills in conducting events.

Self-Appraisal is mandatory for all the faculty members to complete their prescribed format of selfappraisal every year by using Self-Appraisal Google form. It provides the involvement of faculty members and their effective presence in the department/college level. Self-appraisal is prepared on the basis of Subject Skills, Students feedback report from HoD, University Examination results, Counselling and interacting with the students, Participation in FDP / Seminar / workshop, Journal publications and Extra-Curricular Activities.

For non- teaching there is no Performance appraisal. Any negative indication is brought to the notice of the HoD and the Principal, allowing him to mend himself. This is never used as a tool for penalizing the individual, unless it is of serious nature, affecting the regular activities of the institute. At the end of each year, staff is evaluated for their performance. Wherever, there is scope for improvement, it is communicated to the concerned staff through their reporting officers.

The appraisal report of the faculty is submitted to the Principal through the respective heads of the departments. Student feedback is taken on an annual basis and staff members are given a summarized report of the feedback. Staff members meet the Principal along with the HoD and necessary corrective measures are discussed. The Faculty appraisal taken periodically gives details of the academic growth of the faculty.

File Description	Document
Upload any additional information	View Document

# 6.4 Financial Management and Resource Mobilization

# 6.4.1 Institution conducts internal and external financial audits regularly

# **Response:**

This Institute carries out internal as well as external financial audits regularly. Employees of institute take care of internal audit while external auditors representing an outside audit firm conducts external audit. Internal Audit is performed by officials deputed from the institute periodically and the reports are obtained before the conduct of the external audit after the closure of the accounts in all respects.

During the course of internal audit, all required steps are taken to regularize the accounts, to obtain confirmations for the credit balances and to collect documentary evidences wherever required and will look into reconciliation of unit wise balances with the control accounts and banks reconciliations. External audit is done by statutory auditors after the financial year.

External auditors are independent of our organization. They report to the Institution's shareholders. They provide their experienced opinion on the truthfulness of the Institution's financial statements. They observe accounting heads like Fees collected from students, various expenses made, Provident Fund, Profession Tax, TDS, Assets and Liabilities etc. A thorough check and verification of all vouchers of the transactions is carried out in each financial year. The observations given by the auditors are duly complied with. Based on the consolidated reports, our Institution submits the annual returns every year to Income tax authorities and the other relevant authorities concerned.

File Description	Document
Upload any additional information	View Document

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

**Response:** 0

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

2020-21	2019-20	2018-19	2017-18	2016-17
0	0	0	0	0

File Description	Document
Details of Funds / Grants received from of the non- government bodies, individuals, Philanthropers during the last five years	<u>View Document</u>

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

# **Response:**

The institute is being a private self-financed is not in receipt of any financial grant/aid from the Central/ State Governments. Students are admitted as per the Tamil Nadu Government prescribed Higher Education norms by admitting students through DOTE Directorate of Technical Education Counselling (TNEA) and through Consortium of Self Financing Professional, Arts and Science Colleges in Tamil Nadu. The institution collects less fees amount from each student than the fees approved by the government. The amount towards fee collection is deposited in the bank accounts. The amount of fees and the interest earned from the deposits are utilised for the development of the college and recurring expenses like salaries, electricity maintenance, vehicle fuel, infrastructural maintenance etc.

The institute is run by a philanthropist under the name Shanmuganathan trust. The institute's policy is not to receive any donation from any source, hence the college management spends excess money every month to meet out the overall expenses for the welfare of the rural students to get quality education. Since the inception of the institute, the management gives merit scholarships and fee reduction to the students based on their economic background. The management allocated funds are utilized to pay teaching and non-teaching staff salaries, purchase lab equipment, consumables, library books, journals, printing and stationery, advertisement expenses, telephone charges, general insurance, newspaper, audit fee, processing fee for AICTE, incentives to staff, administrative charges, postage and courier, exam remuneration etc.

The management grants sponsorships to conduct various national & International conferences, seminars, workshops, FDP, trainings etc. for both faculty and students. The institution also encourages revenue generation through variety of activities such as testing services and consultancy.

File Description	Document
Upload any additional information	View Document

# 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

# **Response:**

The quality assurance processes, with regard to academics, administrative, are the integral part of the institutional policy and was started in 2017. IQAC fosters a number of activities to make everyone aware

of the quality assurance strategies and processes. The institute has well defined policy for the quality assurances which is ensured by the effective participation from all the stakeholders. The IQAC plays a vital role in maintaining and enhancing the quality of the institution and suggests quality enhancement measures to be adopted.

The institution through its IQAC makes rigorous and continuous efforts to study, analyse and improvise every strategy, activity, process and procedure in all the domains of the institutional activity with a view to achieve, sustain and enhance quality. Continuous feedback, Academic Audit, Feedback from alumni, industry, students, helps it to establish quality culture. The quality is maintained and improved at every stage be it academics, administration, infrastructure etc.

IQAC has contributed significantly in the following areas:

Best Practice 1: Value Added Courses

To enhance the quality in academic and administrative domains, various strategies are institutionalized to keep in pace with the expectations of stakeholders like students, industry and society. Skills and knowledge inculcated beyond the curriculum is necessary. Our college nurtures a wholesome professional and hence our students are encouraged to undergo Value Added Courses and workshops.

These courses develop in them an urge to keep them updated on the latest trends and improve their technical skills further. These courses offer our students an edge over the others and have the following advantages:

These courses will increase the thirst to acquire knowledge and skill level. They will be kept updated on the emerging trends by attending the workshops arranged by our college. Value added Programs are now being made part of our academic delivery which have improved the career opportunities of our students. This will enhance the quality of life of every individual not only in their academic domain but also in their day to day administrative domains.

Best Practice 2: Implementation of an Effective Mandatory Induction Programme

Objective: As per the proposal initiated by IQAC, Mandatory Induction Programme for the first year students was introduced to create manpower who will possess strong technical knowledge and skill, have leadership qualities and be a team player, capable of coming up with innovative solutions and be alive to societal and community concerns as an Engineer. The aim is to help the students evolve into well rounded individuals, process of which starts from the very first year.

# Process:

In order to make students aware regarding the latest technology trends in industry, eminent industry experts are invited to deliver talks in the campus such that the students can be benefitted to the fullest extent to upgrade and enrich their knowledge base. English and Computer Proficiency assessment courses are conducted by the In-house faculty members to assess a student's employability quotient. Awareness rallies made by first year students to get them accustomed to different social issues and to make understand the society.

File Description	Document
Upload any additional information	View Document
Paste link for additional information	View Document

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 (For first cycle - Incremental improvements made for the preceding five years with regard to quality For second and subsequent cycles - Incremental improvements made for the preceding five years with regard to quality and post accreditation quality initiatives )

# **Response:**

The Institution has an integrated documented quality management system that covers the various activities of the institution including academic and administrative activities. The quality management system is rolled out by IQAC cell to ensure quality in all the activities. The members of IQAC are provided with orientation on the quality management system and the implementation of the same is monitored through periodic review and audits. The areas for improvement as identified in review meetings and audits are tracked with corrective action plans. Following are their responsibilities for each department.

Roles and Responsibilities:

Formation of Vision and Mission of the department. Formation of Program Educational Objectives, Program Outcomes, Program Specific Outcomes. Formation of Department Academic calendar for every semester. Analysis of Progress of the Department and suggestions for further improvements. Internal Academic Audit Committee consists of senior faculty members who are well versed in the subject.

# Example 1:

Maintenance of course file for every course by all the faculty members is mandatory in the institute. It is verified periodically. Faculty of each Course prepares a detailed Lesson plan at the beginning of the semester, according to the syllabus framed by the Anna University, Chennai, for the effective completion of the syllabus. Each faculty maintains lecture schedule in attendance register to track the syllabus coverage and to record the students' attendance. Attendance Registers are verified and attested by the HoD every week and Principal by every month. Academic calendar is prepared before the commencement of the academic year and semester in which the dates for the Internal Assessment tests and Model exams are prepared and properly scheduled.

Attendance of the students is monitored keenly and students falling short of required attendance percentage are informed and their parents are alerted of their wards attendance immediately. Special classes are arranged for weak students after working hours to improve their conceptual understanding. Class committee meetings are held periodically to identify the difficulties of Teaching learning process and to rectify immediately.

The output of these actions are measured using different parameters such as pass percentage in the University exam, Number of students placed, Number of students opting for Higher studies, Number of

students clearing competitive examinations etc., Internal Academic Audits are conducted periodically by the Internal Academic Audit team to ensure the follow up of the system and schedule by every department. The internal answer scripts of randomly selected courses are audited by committees for their appropriate evaluation. Student feedback for faculty is being practiced in all departments. Feedback is collected in the end of the semester to assess teaching proficiency of the faculty. Feedback comprises of punctuality, syllabus coverage, clarity of presentation, motivational abilities and maintaining the discipline in the campus, etc. It is also review weather all the students are attained the learning outcomes of a course through course end survey at the end of the respective semester.

Example 2:

Review through ISO audits

Academic audit is conducted to monitor the quality of teaching-learning along with other academic related activities. Internal and External audits are conducted for all the departments annually. ISO Audit is being practiced since 2013 adopting ISO 9001:2000 certification and ISO 9001:2015 at present. Internal audit is conducted by the Management Representative along with the senior ISO coordinators, while the external audit is conducted annually for the randomly selected departments.

The Audits includes verification of the following criteria

Monitoring of teaching-learning process Assessment of teaching process in classrooms. Random verification of evaluated answer papers and question paper during the semester. Innovative teaching methods presented if any Verification of course files Student performance indices – Minimum attendance, marks obtained in the internal examinations and grades obtained in external examinations mechanisms and activities for slow learners for their improvement and outcomes Student counselling /mentoring mechanism Tutorial classes for analytical courses.

Best student projects with awards Evaluation of innovative mini and major student projects Training programs conducted for students Seminars, workshops and Guest Lecturers Scope for Self-learning through certificate courses / Online courses Activities of students in professional bodies and co-curricular activities Student success rate, Placements, Higher education Students feedback and follow up action

The recommendations of the audit committees are taken into considerations for the improvement of academic quality in the department.

Follow up action

- The identified faculty from the above review mechanisms are encouraged to attend professional development programs at institutions of higher reputation with suitable financial support.
- It is made mandatory to do at least one MOOCs from NPTEL to enhance their domain knowledge and modern technical tools.
- According to the result analysis, slow learners and fast learners are identified. Remedial classes are conducted for slow learners to make them up to the mark. Fast learners are encouraged to attend various Techno-Skill programs conducted at outside institutions of reputation.
- Bridge Courses are conducted in identified courses in order to continue with their second year without any difficulty.

IQAC initiated the Quality Circle approach for the benefit of slow learners and to promote student centric learning.

File Description	Document
Upload any additional information	View Document
Paste link for additional information	View Document

# 6.5.3 Quality assurance initiatives of the institution include:

- **1. Regular meeting of Internal Quality Assurance Cell (IQAC); Feedback collected, analysed** and used for improvements
- 2. Collaborative quality intitiatives with other institution(s)
- **3.**Participation in NIRF
- 4. any other quality audit recognized by state, national or international agencies (ISO Certification, NBA)

Response: C. 2 of the above

File Description	Document
Upload e-copies of the accreditations and certifications	View Document
Upload details of Quality assurance initiatives of the institution	View Document
Upload any additional information	View Document
Paste web link of Annual reports of Institution	View Document

# **Criterion 7 - 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 last five years.

# **Response:**

Shanmuganathan Engineering College is an equal opportunity employer. The institution gives priority to gender equality in all stages of its operation. The college has appointed considerable number of women staff both in teaching and non-teaching. Three departments out of six is headed by women professors. Similarly, the number of women in the administrative and housekeeping departments is high. The women staff members are given maternity leave as per the regulations. Their employment service is also accounted during their maternity leave. Their service is taken into account even if they extend their maternity leave. The girl students are provided with separate room for their privacy. The institution have a separate hostel for girl students, which is completely secure and protecting their privacy. They are also supported with lady wardens including teaching staff. The institute organizes various awareness programs and cultural events for girl students of our institute in regular intervals. Our institute maintains zero tolerance towards anti-ragging, sexual harassment and is very sensitive to issues related to women safety and security. The college has installed closed circuit (CC) cameras to monitor the security and safety of the girl students in all the academic blocks and hostels. A committee for women's welfare is constituted in our campus to address the issues related to women's welfare and their safety.

File Description	Document
Link for specific facilities provided for women in terms of: a. Safety and security b. Counselling c. Common Rooms d. Day care center for young children e. Any other relevant information	<u>View Document</u>
Link for annual gender sensitization action plan	View Document

**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

**Response:** C. 2 of the above

File Description	Document
Geotagged Photographs	View Document
Any other relevant information	View Document

7.1.3 Describe the facilities in the Institution for the management of the following types of degradable and non-degradable waste (within 500 words)

- Solid waste management
- Liquid waste management
- Biomedical waste management
- E-waste management
- Waste recycling system
- Hazardous chemicals and radioactive waste management

**Response:** 

### Solid waste management

As an eco-friendly campus, our college has a strong waste management system. Our college continues to invest in waste management systems and strives hard to make the campus completely pollution free and green. Housekeeping staffs are involved in maintaining the college campus and hostels clean and tidy. The day-today litters, paper wastes, plastic, food wastes etc. are segregated into biodegradable and recyclable wastes. Biodegradable wastes are collected and organically treated to convert them into composts. The recyclable wastes such as examination papers are collected and periodically supplied to the local recycling vendors to avoid wastage dumping. Non bio-degradable wastes such as metals and other scraps are collected and supplied to authorized scrap agents. Wooden wastes are also effectively re-used by the inhouse carpenter.

# E-waste management

Generation of e-wastes in our college is still less. The computers, printers, laboratory equipment etc. are periodically serviced and maintained properly. They are dumped only when they are broken completely which is very less in our campus. Once sufficient quantities of e-wastes are collected, it will be sold to authorized vendors.

File Description	Document
Link for Geotagged photographs of the facilities	View Document

# 7.1.4 Water conservation facilities available in the Institution:

- **1.**Rain water harvesting
- 2. Borewell /Open well recharge
- **3.** Construction of tanks and bunds

# 4. Waste water recycling 5. Maintenance of water bodies and distribution system in the campus

**Response:** B. 3 of the above

•	
File Description	Document
Geotagged photographs / videos of the facilities	View Document
Any other relevant information	View Document

# 7.1.5 Green campus initiatives include: 1. Restricted entry of automobiles 2. Use of Bicycles/ Battery powered vehicles 3.Pedestrian Friendly pathways 4.Ban on use of Plastic 5.landscaping with trees and plants Response: Any 4 or All of the above File Description Geotagged photos / videos of the facilities View Document Any other relevant documents Link for any other relevant information

7.1.6 Quality audits on environment and energy regularly undertaken by the Institution and any awards received for such green campus initiatives:

- 1.Green audit
- 2. Energy audit
- **3.**Environment audit
- 4. Clean and green campus recognitions / awards
- **5.**Beyond the campus environmental promotion activities

# **Response:** D.1 of the above

File Description	Document
Any other relevant information	View Document

# 7.1.7 The Institution has disabled-friendly, barrier free environment

- **1. Built environment with ramps/lifts for easy access to classrooms.**
- 2. Disabled-friendly washrooms
- 3. Signage including tactile path, lights, display boards and signposts

- **4.** 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

Response: D.1 of the above	
File Description	Document
Geotagged photographs / videos of the facilities	View Document

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 500 words).

# **Response:**

The institution is undertaking various initiatives in the form of celebration of days of Eminent personalities, National Festivals, NSS, and other such activities to provide for an inclusive environment by bringing students and teachers with diverse background on single platform for creating inclusive environment. These functions help in developing tolerance harmony towards culture, region and linguistics and also communal social economics and other diversities. Different sports and cultural activities organized inside the campus promote harmony towards each other. Commemorative days like Women's day, Yoga day along with regional festivals like ayutha pooja, Pongal are celebrated. NSS also organize events/programme to disseminate communal and socio-economic messages. The subject professional ethics is made mandatory to all B.E students across disciplines. Convocation ceremony is conducted every year, where the convocation address is delivered to inspire and motivate the students for future journey. Two important national festivals, Republic Day and Independent Day are celebrated every year in the campus. All teaching, non-teaching staff and students participate for the cause of nation. The inspiring speeches are conducted. The different grievance redressal cells in the institute deal grievances without considering anyone's racial or cultural background.

File Description	Document
Link for any other relevant information	View Document

# **7.1.9** Sensitization of students and employees of the Institution to the constitutional obligations: values, rights, duties and responsibilities of citizens (within 500 words).

# **Response:**

Our institution takes all possible initiatives in organizing various events and programmes for moulding the students and staff to become responsible citizens of the country by sensitizing them to the constitution of the country. As responsible citizens of the country the students are motivated to take part in various activities of the college. The college encourages the students to take part in blood donation camps, study tours for them that make them understand the importance of protecting the cultural heritage of the country

The special lectures also focus on enlightening the students about their rights and dutiesbeing the responsible citizens of the country. The students have taken up many cleanliness drives both inside the campus and nearby villages considering it as a responsibility of every citizen. The students have also taken up Plantation drives to provide a clean and green environment for all. Swachh Bharat Abhiyan has also been an important initiative taken up by the college where we have organized an awareness rally for the students and took a tour in entire town to create awareness among all. The college has also conducted a voter's awareness programme for all the students and were sensitized about their constitutional powers of voting.

File Description	Document	
Link for any other relevant information	View Document	

**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.

- 1. The Code of Conduct is displayed on the website
- 2. There is a committee to monitor adherence to the Code of Conduct
- **3.** Institution organizes professional ethics programmes for students, teachers, administrators and other staff
- 4. Annual awareness programmes on Code of Conduct are organized

# Response: C. 2 of the above

File Description	Document
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 Document</u>
Code of ethics policy document	View Document

# 7.1.11 Institution celebrates / organizes national and international commemorative days, events and festivals (within 500 words).

# **Response:**

The Institution also commemorates the anniversaries of great Indian personalities like Dr. A.P.J Abdul Kalam, Mahatma Gandhi. On Teachers day the students puts up a show to express their love and gratitude for their teachers. Institute takes special efforts to promote technical culture by organising activities under various professional communities through ISTE professional chapters. Women's day is celebrated on International Women's day to show respect towards women in all the efforts taken by them to manage the personal and professional life and for their contributions. Apart from these, many events and guest lectures are regularly organized to instil a sense of national pride and gratitude towards sacrifices of great leaders of our country.

File Description	Document
Link for any other relevant information	View Document

# 7.2 Best Practices

**7.2.1** Describe two best practices successfully implemented by the Institution as per NAAC format provided in the Manual.

**Response:** 

# **Institutional Best Practice 1: HRD Training**

# **Objectives of the Practice**

The Training and Placement Cell at our institution guides and helps the students in securing jobs with their knowledge and achievements, by organizing campus drives and exploring various avenues for their placements. The Placement Cell works to ensure that the recruitment process is successful for the students of our institution.

# The Context

This concept was originated after the observation and study that there was a need for conducting value added training programmers and enhance the employability of the students, and also to assist the development of the students with balanced set of technical skills, interpersonal skills and soft skills, and with a positive attitude of life.

# The Practice

Continuous placement training is offered to equip the students on personality development, communication, soft skills, confidence building, interview skills, and tests of reasoning, aptitude, by experts in the respective fields.

# **Evidence of Success**

There is an increase in the total number of offers made each year. The overall impact of all this has resulted into many reputed companies visiting our campus for the recruitments.

# **Problems Encountered and Resources Required**

Initially the students did not take active part in the activities as HRD training is not a part of the university guidelines. Lots of efforts and counselling had to be done to make the students realize the importance of taking active part in all HRD activities.

# **Institutional Best Practice 2 : Students Attendance Monitoring**

# **Objective of the Practice:**

To achieve 100% attendance in each class

# The context

Difficulty in coping with the studies results in disinterestedness towards studies. Some such students are inclined to slight learning and absent themselves to the classes. In view of evading unnecessary absence to the classes.

# The practice Students

attendance is monitored everyday by the Faculty advisors. If any absence is identified, the parents are intimated and reason for absence is obtained. An entry of the same is done in a register exclusively maintained for this purpose. The register is taken to the perusal of the Head of the departments and the Principal and acknowledged by them. The absentees are counselled by the Faculty advisors to make them committed to their studies which eventually fetch a good attendance.

# **Evidence of success**

This regular follow up of students and parents every day, aids to track the students and keep them in the streamline. The number of students produce 100% attendance is getting enhanced

# Problems encountered and Resource required

In alignment with the absence, some parents do not respond the faculty properly which may affect the result of the students. Contingent upon the parental response they are given an understanding of the necessity of the attendance to cope with the studies. Students are also counselled and guided individually in bringing up the interest in learning. Identified repetition in individual's absence is taken to the attention of the Head of the department and the student is counselled by the department head. Long absence is also encountered occasionally due to the ill-health of some students and notification is sent to the parents for a meeting in person. Parents and students are counselled for unaffected continuance of studies.

File Description	Document
Link for Best practices in the Institutional web site	View Document
Link for any other relevant information	View Document

# **7.3 Institutional Distinctiveness**

# **7.3.1** Portray the performance of the Institution in one area distinctive to its priority and thrust within 1000 words

# **Response:**

This institution was started in 2001 in the Arasampatti Village with a high ambition to give quality education in this rural area. The college management is very keen in empowering the next generation of students in this locality. In 2001 getting an engineering degree in this area was quiet a dream for the nearby village students. But the chairperson of the institute came up with a mission to start this institution for the benefit the rural students.

Most of the Students those who are admitted in the college belonged to the first graduate category and their parents are under poverty line. Therefore, the institution was started as a service to the society. Since the inception of the institute, the management gives merit scholarships and fee confession to the students based on their economic background. The management allocated fund every year for the students welfare. Merit scholarships were given to the students based on the marks they scored in their HSC and diploma examinations. Every year around 65 students were benefited in the scheme with the approximate total concession of Rs.15 lakhs each year. The chairperson and the management of the institute wish this to continue this service forever for the development of society by giving quality education to the rural students.

In tune with the vision of the institution, SEC strives in achieving academic excellence by developing a culture of curiosity and creativity that will challenge the frontiers of teaching/learning; stimulate research; raise the level of analytical reasoning and inquiry; and enable students to acquire leadership, human relations, communication, and technology skills. This is witnessed by maintaining consistency in achieving more number of university ranks. The students face many number of academic challenges in college, including finding time to study, understanding course content and maintaining a high degree of motivation. Along with meeting these challenges, students often struggle to balance academic demands with work, personal responsibilities and social experiences. To combat these issues, our college takes following steps:

- To maintain academic excellence, our college established the objective of achieving 75% result in each department both in internal and university exams.
- To develop a time management system among students, internal assessment tests are conducted periodically where students are trained to manage their time to achieve good scores in university exams. Also, it reduces the burden and tension related to the final examination. In addition to that, it acts as a link which provides data related to student's performance. This gives teachers an opportunity to evaluate the students. Moreover, it helps students in continuous learning.
- Assignment is given to students as it enables the student to research on their own and teach themselves. Periodical assignments are given to enhance the creativity of the students.
- Our college has a plethora of resources to help students achieve success. To motivate toppers in achieving university rank, they will be provided with two extra books per subject in library.Further, to motivate university rank holders, they will be given medal, certificate and gold coins during convocation. Apart from this, students can take books from both central library and departmental library to enhance their knowledge.
- To enhance academic excellence, subject wise question bank with solved answers, focusing on previous year university question paper is prepared by the faculty members and shared among student community. In addition to this, subject wise notes are provided to all students. Apart from this, faculty members prepare Part A, Part B, Part C questions with answers and share it to all

students.

- To bridge the gap between the academic and industry need, Value Added Courses (VAC) are conducted regularly in our College. It is important for higher education institutions to supplement the curriculum to make students better prepared to meet industry demands as well as develop their own interests and aptitudes. These courses are conducted by professionals and industry experts and help students stand apart from the rest in the job market by adding further value to their resume.
- One of the best ways to improve the academic performance is to establish a study routine. A time everyday is set aside to read textbooks, review notes, and work on homework assignments. Hence, our college has established study time for hostel students between 6.00 to 8.00 PM. Faculty members will go to hostel and will clarify the doubts in their respective subjects. For day scholars, to improve academic performance, 3.00 to 5.00 PM are set aside as study time where they will be trained on previous year question paper etc.
- In pursuing the Vision of the college, honoring the achievers every year to motivate the students who have been placed through campus. In Annual day celebrations, as a token of recognizing the efforts of the students who excelled in various academic competitions and placement, students will be given offer letter, certificate etc.
- To empower students, and get to know about the students on their personal level, they are given counseling to make them feel mentally healthy to achieve current academic success and future career success.
- SEC having faculty strength qualifying with doctoral degrees (PhD) whose knowledge is transmitted to students, which helps in achieving academic excellence.
- A motivated teacher is crucial for a successful class. SEC respects each teacher by valuing their contribution in achieving academic excellence by rewarding them with certificate and cash prize for achieving 100% result in their respective subject.
- Thus, most innovative teaching learning methodologies that have been adopted in order to achieve academic excellence.

File Description	Document
Link for appropriate web in the Institutional website	View Document
Link for any other relevant information	View Document

# **5. CONCLUSION**

# **Additional Information :**

# **HIGHLIGHTS OF SEC:**

- No capitation fee.
- Consistency Excellent results in the University exams.
- Regular internal assessment tests and model examinations.
- Wi-Fi enabled campus including hostels.
- Facilities for indoor and outdoor games.
- Fitness center/Gymnasium.
- College bus facility for comfortable travel from and to various towns.
- Good canteen facility.
- RO water plant to provide hygienic water supply.
- SEC has excellent infrastructure facilities for the overall development of faculty and students.
- It has a conducive atmosphere for study, with a serene campus that is clean and attractively green.
- Achiever students and those with good potential are given scholarships for studies.

# **Concluding Remarks :**

Shanmuganathan Engineering College, Pudukottai, Tamilnadu stands as a synonym for quality education. Shanmuganathan Engineering College was established in the year 2001 by great visionaries to impart quality education to all the sections of society. SEC is a rapidly growing engineering college in Pudukkottai district as it provides a solid foundation to the young minds and nurtures them to face the world boldly and optimistically.

The Institute provides quality education in Engineering for last two decades without getting any capitation fees from the students. The Institute has a very strong, experienced and highly dedicated group of faculty members, having expertise in varying areas. An ever-consistent faculty-student ratio is maintained between the number of teachers and that of students. Most of the faculty members are engaged in higher research. Disciplined but friendly liaison is maintained with students. The teaching-learning process is at its best with highly sophisticated laboratories under able care of learned group of Technical assistants.

Special care is taken for enhancing the level of soft skills, communication skills of students using expertise of departmental faculty as well as invited industrial experts. There are many best practices being followed in the Institute, as a result the Institute has made a name for itself in the region.

Shanmuganathan Engineering College has scaled a rapid growth in terms of quality and quantity since its inception in 2001 with support of vision of the management. The thrust in academic excellence and holistic growth of the students remain the prime focus of the institute.