

# FOR 1<sup>st</sup> CYCLE OF ACCREDITATION

# ST.JOSEPH'S COLLEGE OF ENGINEERING AND TECHNOLOGY

A.S. NAGAR, ELUPATTI 613403 www.sjcettnj.edu.in

#### Submitted To

# NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL BANGALORE

**July 2024** 

## 1. EXECUTIVE SUMMARY

#### 1.1 INTRODUCTION

St. Joseph's College of Engineering and Technology is an Educational Institution founded in the year 2007 by Rev.Fr.Dr.J.E.Arulraj, Founder and Chairman, DFT Group of Institutions. The College was promoted and managed by the Society of Daughters of Mary Immaculate (DMI). It is a Christian Minority Institution of Higher Technical Education, approved by the All India Council for Technical Education (AICTE), NewDelhi and affiliated to Anna University, Chennai. The college has a current annual intake of 360 students for the 6 branches offered at undergraduate level and 60 students for the MBA programme offered at the post-graduate level.

An objective measurement of the quality of education imparted at the college would be the number of rank holders at the examinations held at the University level. We had 27 University Rank holders upto 2020-2021. As part of our ongoing process of enlarging our Industry Institute Interaction, our faculty constantly works to enter into MOUs with corporate houses that lead to better opportunities for our students to get in-plant training, corporate project work possibilities, research programs and finally suitable placements in those reputed organizations. The research oriented faculty is evident from the fact that few of them already hold Ph.D degrees and many more are pursuing their Ph.D studies.

As part of the process of enhancing the competitive spirit of the students various technical events like Technical Seminars, National and International Conferences, Guest Lectures, Symposium and Project Expo were organized inside the campus. Students are encouraged to actively participate in Inter-Collegiate competitions at national level to get exposure. Students are encouraged to participate in the NSS, Youth Red Cross, RRC and other such club activities to foster a feeling of "social responsibility" amongst them. A well-maintained playground with excellent facilities for various outdoor games ensure that our students deliver consistent good performance in extra-curricular activities and thus bring justifiable laurels to the institution in various district, state and university level competitions. Hostel facilities separately for girls and boys are available. A well maintained fleet of buses provide reliable, regular and punctual logistics to the day scholars as well as to the faculty.

#### Vision

To be an institute of Excellence in Engineering & Management through value based education and multidisciplinary research for the positive transformation of the society.

#### Mission

Mission 1: To inculcate technical knowledge and soft skills among the students through student-centric learning process.

Mission 2: To empower the students to develop as ethically outstanding professionals capable of creating global engineering enterprises.

Mission 3: To create a collaborative research environment that focuses on socio-economic needs.

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

#### **Institutional Strength**

- Institution has focused Vision, Mission and Quality Policy.
- ISO Certified Institution.
- Qualified and Experienced Faculty with Dedication towards work.
- Good Leadership.
- Workforce has a commitment to quality, dedication, positive morale, and work ethic.
- ICT enabled classrooms.
- Direct mentoring of students is done by the faculty to upgrade the students skills and confidance.
- Produce knowledgeable graduates from rural areas with high earning power.
- Value added courses conducted for all the branches based on the current industry demand.
- MOU signed with various national and international companies for the betterment of the students and faculty.
- Various student centric activities like seminar presentation, poster presentation, paper presentation, working prototype contest and group discussion are conducted for the all the branches.
- Scope for enhancing interaction with the alumni.
- Dedicated career guidance and development cell for the benefit of students for higher studies, overseas education and placement.
- Industry Institute Interaction cell was framed for the benefit of students and faculties.
- NPTEL local chapters has been established.
- Fr.Micheal's Coaching Centre was established inside campus for preparing public service commission and providing opportunities for preparing competitive exams.
- MOU signed as CO-host for technology Enabled business Incubator with Periyar Maniammai University.

#### **Institutional Weakness**

- Lags in getting funded projects from the government.
- Faculty and Students lags in Journal Publications.
- Number of PhD's in each department need to be encouraged.
- Paying capacity of the parents of our students is not upto the level due to the rural background.

#### **Institutional Opportunity**

- Increased demand for Engineers in Power Sectors.
- Scope for enchanced research work to be carried out in all the fields of Engineering.
- Possibility of becoming effective and individual entrepreneurs by enjoying the benefits and encouragement given by the management.
- To frame and design an effective Curriculum, Teaching learning methodologies that bridges the gap between the Industry and Institution.
- Initiated CO-host for technology Enabled business Incubator in collaboration with MHRD and PeriyarManiammai University.

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#### **Institutional Challenge**

- Global recession may hamper placement opportunities for students. To come out from this challenge the desired course objectives and outcomes are to be achieved satisfactorily.
- Due to pandemic situations placement opportunities in the companies are less and only minimum numbers of students are placed in reputed companies like TCS, WIPRO, CTS, HCL, CAPE GEMINI, etc.
- Rapid transition of technology.
- Increased competition globally and locally.

#### 1.3 CRITERIA WISE SUMMARY

#### **Curricular Aspects**

Affiliated to Anna University, Chennai, St.Joseph's College of Engineering and Technology executes the CBCS curriculum prepared by the university with its own methods of OBE. The curriculum is updated regularly to align with industry standards and technological advancements. It includes courses which integrate crosscutting issues relevant to Professional Ethics, Human Values, Environment and Sustainability. To augment skills, the college conducts value added courses. In accordance with the university academic calendar, institution academic calendar, and department calendar, events are prepared for effective implementation of curriculum and OBE. To check effectiveness and initiate further improvement, Department Advisory Board (DAC) & Program Assessment Committee (PAC) are constituted as per the guidelines given by Internal Quality Assurance Cell (IQAC) of the institution.

Faculty members implement innovative teaching methodologies for implementation of teaching-learning process through use of ICT. The institution ensures content beyond the university prescribed syllabus is delivered. Skill development center with industry collaborated labs enhance the learning experience. Project work is mandatory and Students of all years also undergo internship. The innovation culture in the campus results in several publications & patents. The EDC cell and Incubator Center sharpens the business skills of the students. Mentoring system enables holistic growth of students. The institution possess alumni's who are well linked with the college. Institution obtains feedback on the curriculum, department and institution from the stakeholders parents, employers, alumni, students & staff which is analyzed and actions are planned which serve as input for the continuous improvement in teaching-learning process.

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

The rankings of those enrolling show that the caliber of applicants for admission has been rising every year. By hiring skilled and experienced faculty, the institute complies with AICTE standards, which has improved the teaching-learning process. Courses are distributes to faculty members according to their specializations and competencies while upholding the mandated teacher-student ratio. Teachers create comprehensive lesson plans, handouts, and course plans as part of the academic program.

Faculty members use cutting-edge educational approaches and ICT tools in their creative teaching and learning processes. Implementing a Learning Management System (LMS) improves communication between students and teachers. Technical training programs tailored to a particular field are offered to close the knowledge gap between the curriculum and industry demands. To further enhance students' domain expertise, conferences,

workshops, and guest lectures are arranged.

For students entering the workforce later, remedial sessions are provided, and bridge courses are designed for slower learners. Advanced learners are encouraged to take part in hackathons, design competitions, and related events. Additionally, the institute has a mentorship program in which each faculty member is paired with about twenty students, serving as a local mentor for each.

The system of exams and evaluations is conducted methodically in compliance with the norms and regulations of the university, which are updated on a regular basis to improve efficiency. PEOs, POs, and PSOs are assigned to each program according to the outcome-based education model. Each course's goals and objectives are created utilizing the relevant Bloom's taxonomy levels. In order to guarantee high-quality questions that go beyond memorization, question setters for the Semester End Examination (SEE) and Continuous Internal Evaluation (CIE) also adhere to different levels of Bloom's taxonomy, such as Application, Analysis, and Evaluation. Systematic procedures have been established to assess the attainment of PEOs, POs, PSOs, and COs. Based on the perceived attainment levels each year, appropriate corrective measures are implemented.

#### Research, Innovations and Extension

St.Joseph's College of Engineering and Technology (SJCET) has cultivated the dynamic environment conducive to research, innovation, and extension activities, underpinned by a commitment to academic excellence and societal impact. Over the past five years, SJCET has secured various research and innovation activities from non-governmental agencies, demonstrating its dedication to advancing research activities. The institution has implemented measures to enhance its research capabilities and publication output, reflecting its growing momentum in research grants and scholarly contributions. Notably, each faculty member at SJCET has contributed to research by publishing papers in journals listed on the UGC CARE/SCOPUS and SCI indexed lists, as well as publishing books, book chapters, and presenting papers at national/international conferences.

SJCET organized many number of workshops, seminars, and conferences, covering research methodology, IPR, and entrepreneurship, promoting continuous learning and skill development for students and faculty members. SJCET's focus on promoting innovation is evident through initiatives like the Institution Innovation Council (IIC), Students Innovation Club and the establishment of an Intellectual Property Rights and Research and Development Cell (IPR & R&D). This recognition reflects its dedication to fostering industry-aligned research, as evidenced by patents, technology transfer workshops, and student-led startup incubation efforts. Moreover, the institution has actively engaged in extension activities aimed at addressing societal needs and promoting community welfare. Through units such as the National Service Scheme (NSS), Youth Red Cross (YRC), and Red Ribbon Club (RRB) SJCET has organized numerous initiatives, including blood donation camps, COVID-19 vaccination drives, and cleanliness campaigns. These efforts have not only benefited the local community but also enriched the educational experience of students, fostering a sense of social responsibility and leadership. SJCET's collaborations with institutions and industries promote holistic development through enriching projects, internships and research activities. In summary, SJCET has emerged as a beacon of innovation and social responsibility, driving research excellence, nurturing entrepreneurial spirit, and making meaningful contributions to the community and beyond.

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

St. Joseph's College of Engineering is a shining example of excellence in the field of higher education. There

are three conference rooms, seven lecture halls, computer laboratories in every department, and a 1500-person capacity separate auditorium. Our college has 305 computers. Out of them, 267 were designated for student use and 38 were meant for administrative use. Every three years, computers are updated with the newest software. A licensed copy of K7 Total Security antivirus software guards every computer system. Numerous multi-story buildings, including a library, cafeteria, dormitories, big auditoriums, dining areas, training and placement centers, 34 laboratories, 38 classrooms, and dining areas, are all deliberately constructed to support successful knowledge transfer on the campus. The most up-to-date technology is available in the classrooms, including learning resources, quiz platforms, video lecture halls, ERP systems, and smart classrooms.

A robust network of computer systems linked to the internet at a high bandwidth of 50 mbps guarantees dependable internet access. In order to improve accessibility, Wi-Fi hotspots have also been installed throughout the campus. More than 27907 volumes of literature in several areas, including Mechanical, ECE, MBA, EEE, AI&DS, and CSE, are available at the library. The library also has subscriptions to 30 national and international journals, including four of the top newspapers. The central library is fully automated in the year from 2018 with Auto-Lib Library Software Management. Our college has CCTV surveillance for increased security, and well-equipped lecture halls and auditoriums. The best transportation options are offered, including a fleet of buses to make it convenient for nearby personnel and students. The college offers top-notch sports facilities, including a gymnasium with cutting-edge equipment, to encourage students' physical condition. Cultural activities are arranged on a regular basis with the aim of promoting student enrollment and developing artistic potential.

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

Students are the cornerstone of any academic institution, and it is imperative to prioritize their well-being and success. St. Joseph's College of Engineering and Technology takes numerous measures to ensure the best interests of its students are met. The college acknowledges student achievements by presenting various awards and scholarships during the Annual Day function. Financial assistance is provided through fee concessions and scholarships to support students from socio-economically disadvantaged backgrounds. Additionally, the college is committed to inclusivity with an Equal Opportunity Cell, ensuring infrastructure is designed to accommodate differently-abled students.

For those requiring additional academic support, the college offers tutorials, remedial classes, and encourages interaction with teachers to make learning more accessible. A professional counsellor is also available for students seeking guidance, helping them manage personal and academic challenges. Educational and industrial tours are regularly organized to expose students to practical aspects of their studies and industry practices. The Placement Cell plays a crucial role in connecting students with suitable employment opportunities, helping bridge the gap between education and career.

The college has established various committees to address student concerns promptly. The Grievance Redressal Cell, Internal Complaints Committee (against Sexual Harassment), and the Anti-ragging Committee are dedicated to ensuring a safe and supportive environment for all students.

St. Joseph's College of Engineering and Technology, Thanjavur, also boasts an active Hockey Sports Club, with athletes excelling at both national and international levels. Numerous societies and associations represent the college in competitions across the country, showcasing the diverse talents of its students.

The college values student feedback, collected through mentors, to continually improve its operations.

Maintaining close ties with alumni underscores the strong bond between the college and its former students, reflecting the lasting impact of their educational experience. Through these comprehensive support systems, St. Joseph's College of Engineering and Technology demonstrates its commitment to fostering a nurturing and enriching environment for all its students.

#### Governance, Leadership and Management

The institute has an explicitly stated organizational structure, and the Principal, with the support of department heads and other committees established for specific roles, implements the policies of the management committee and the board of governors. Faculty members are represented on the Board of Studies, Academic Council and in various committees. Representatives from the faculty, non-teaching staff, and students take part in several committees within the institution as part of decentralization.

The institution provides a number of welfare programs to support the professional and personal development of its academics and staff. These include of gratuities, financial aid for higher education, maternity leave for women, provident funds, etc. Faculty are encouraged to attend faculty development programs, Refresher courses workshops, conferences etc and are financially supported by the way of providing on duty, travelling allowance, daily allowance, registration fee etc. Administrative and technical training programs are offered to non-teaching staff, while professional development programs are offered to teaching faculty. For both teaching and non-teaching staff, the institute maintains a clear performance evaluation system. The institute has clear policies in place for internal and external auditing as well as budgeting.

The institute's quality features are monitored by the IQAC cell. The teaching-learning process, evaluation and assessment, organization, etc., are all routinely reviewed by the IQAC, and as a result new courses have been introduced with an aim to enhance not just the quality of placements but also to develop their knowledge, skill sets and overall personality. For the purpose of its overall development, the institute has developed a strategic plan and is still carrying it out.

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

Gender Equity is everybody's responsibility to ensure that women are given equal rights and opportunities in life. Recent day shows the increase of violence against women which can be reduced by providing safety and security to the female students and faculty. Women Empowerment Cell, Grievances and Redressal Cell, Internal Complaint Committees are there to protect the female students and faculty. We have conducted various awareness programmes towards the welfare of the female students and faculty. Mentoring facilities available in each department through this, faculties counselled the girls' students separately and addressed their problems.

The institution has initiated to maintaining the whole campus as Eco friendly campus by providing awareness towards tree plantation, rain water harvesting, uses of Alternate sources of energy, energy conservation measures such as managing various types of degradable and non-degradable waste and water conservations. The quality of Environment, Energy usages and Green Campus Initiatives are verified through the certified Auditors. Energy, Environment and Green Audits are performed every year. Differently able students are provided with various facilities like Wheel Chairs, Ramp facility and Divyangjan Toilets. The NSS/YRC/RRC units of the College actively engaged in a variety of activities for the benefit of the people in rural areas. Government and Management provide financial support to deserving individuals, enabling them to pursue their educational goals without financial burden.

Self S	Study Report	of ST.	JOSEPH'S	COLLEGE	OF ENGINEERING	AND	TECHNOLO	77
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## 2. PROFILE

## 2.1 BASIC INFORMATION

Name and Address of the College				
Name	ST.JOSEPH'S COLLEGE OF ENGINEERING AND TECHNOLOGY			
Address	A.S. NAGAR, ELUPATTI			
City	Thanjavur			
State	Tamil Nadu			
Pin	613403			
Website	www.sjcettnj.edu.in			

Contacts for Communication					
Designation	Name	Telephone with STD Code	Mobile	Fax	Email
Principal	I. NEETHI MANICKAM	04362-282465	9444395284	-	sjcet.tnj@gmail.co m
IQAC / CIQA coordinator	D. MERCY	-	9842270067	-	iqacsjcet@gmail.co m

Status of the Institution	
Institution Status	Self Financing

Type of Institution	of Institution	
By Gender	Co-education	
By Shift	Regular	

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<b>Recognized Minority institution</b>	cognized Minority institution			
If it is a recognized minroity institution	Yes Minority GO.pdf			
Yes, Specify minority status				
Religious Christian Minority				
Linguistic				
Any Other				

#### **Establishment Details**

State	University name	Document
Tamil Nadu	Anna University	View Document

Details of UGC recognition				
<b>Under Section</b>	Date	View Document		
2f of UGC				
12B of UGC				

	Details of recognition/approval by stationary/regulatory bodies like AICTE,NCTE,MCI,DCI,PCI,RCI etc(other than UGC)						
Statutory Recognition/Appr oval details Instit ution/Department programme  Recognition/Appr oval, Month and year(dd-mm-yyyy)  Remarks months							
AICTE	View Document	10-06-2023	12				

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	

<b>Location and Are</b>	Location and Area of Campus					
Campus Type	Address	Location*	Campus Area in Acres	Built up Area in sq.mts.		
Main campus area	A.S. NAGAR, ELUPATTI	Rural	15.16	29156.26		

## 2.2 ACADEMIC INFORMATION

Details of Programmes Offered by the College (Give Data for Current Academic year)						
Programme Level	Name of Pro gramme/Co urse	Duration in Months	Entry Qualificatio n	Medium of Instruction	Sanctioned Strength	No.of Students Admitted
UG	BE,Compute r Science And Engineering,	48	Twelfth with physics, chemistry and mathematics as compulsory subjects from a recognized board	English	120	103
UG	BE,Electroni cs And Com munication Engineering,	48	Twelfth with physics, chemistry and mathematics as compulsory subjects from a recognized board	English	60	28
UG	BE,Electrical And Electronics Engineering,	48	Twelfth with physics, chemistry and mathematics as compulsory subjects from a recognized board	English	30	17

UG	BE,Mechanic al Engineering,	48	Twelfth with physics, chemistry and mathematics as compulsory subjects from a recognized board	English	30	17
UG	BTech,Artifi cial Intelligence And Data Science,	48	Twelfth with physics, chemistry and mathematics as compulsory subjects from a recognized board	English	60	55
PG	MBA,Master Of Business Administrati on,	24	Any Degree	English	60	55

## Position Details of Faculty & Staff in the College

				Τe	eaching	g Facult	y					
	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	0				0				0			1
Recruited	0	0	0	0	0	0	0	0	0	0	0	0
Yet to Recruit	0	'			0				0			
Sanctioned by the Management/Soci ety or Other Authorized Bodies	9				17				41			
Recruited	7	2	0	9	10	7	0	17	7	34	0	41
Yet to Recruit	0			1	0	1	1		0	1		

Non-Teaching Staff							
	Male	Female	Others	Total			
Sanctioned by the UGC /University State Government				0			
Recruited	0	0	0	0			
Yet to Recruit				0			
Sanctioned by the Management/Society or Other Authorized Bodies				22			
Recruited	13	7	0	20			
Yet to Recruit				2			

	Technical Staff							
	Male	Female	Others	Total				
Sanctioned by the UGC /University State Government				0				
Recruited	0	0	0	0				
Yet to Recruit				0				
Sanctioned by the Management/Society or Other Authorized Bodies				2				
Recruited	2	0	0	2				
Yet to Recruit				0				

## **Qualification Details of the Teaching Staff**

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	Permanent Teachers									
Highest Qualificatio n	Profes	ssor		Associ	ate Profes	sor	Assist	ant Profes	sor	
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt/ LLD/DM/M CH	0	0	0	0	0	0	0	0	0	0
Ph.D.	7	2	0	0	3	0	0	4	0	16
M.Phil.	0	0	0	1	1	0	0	0	0	2
PG	0	0	0	9	3	0	7	30	0	49
UG	0	0	0	0	0	0	0	0	0	0

	Temporary Teachers									
Highest Qualificatio n	Professor		Associate Professor			Assistant Professor				
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt/ LLD/DM/M CH	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
UG	0	0	0	0	0	0	0	0	0	0

	Part Time Teachers									
Highest Qualificatio n	Professor		Associate Professor			Assistant Professor				
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt/ LLD/DM/M CH	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
UG	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
UG	Male	455	3	0	0	458
	Female	245	0	0	0	245
	Others	0	0	0	0	0
PG	Male	40	0	0	0	40
	Female	58	0	0	0	58
	Others	0	0	0	0	0

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

Category		Year 1	Year 2	Year 3	Year 4
SC	Male	24	22	19	10
	Female	17	11	14	6
	Others	0	0	0	0
ST	Male	0	1	0	0
	Female	0	0	0	0
	Others	0	0	0	0
OBC	Male	123	114	81	29
	Female	73	49	62	27
	Others	0	0	0	0
General	Male	0	1	1	0
	Female	0	0	1	1
	Others	0	0	0	0
Others	Male	0	0	0	0
	Female	0	0	0	0
	Others	0	0	0	0
Total	,	237	198	178	73

#### Institutional preparedness for NEP

1. Multidisciplinary/interdisciplinary:

Multidisciplinary education is a methodology that integrates multiple fields of study. In a multidisciplinary education students are exposed to knowledge, perceptions and methodologies of various discipline rather than focusing on a single discipline. The features of multidisciplinary educations are Interconnected Learning, Collaborative Learning and Integrated Learning. As per the Anna University Curriculum Open electives are given to the students as a part of multidisciplinary learning. Through the Open electives students can gain more knowledge in addition to their own disciplines. Now a day's engineers require to have strong problem-solving skills to face the real world

problems. Interdisciplinary education enriches the skills by exposing students to various perspectives, analytical tools and problem-solving methods which enables them to approaches the problems in an effective manner. As per the Anna University Curriculum Professional electives are introduced to learn each and every concepts of Engineering clearly and in depth as a part of Interdisciplinary learning. Through the Professional electives students can gain deep knowledge and know the technology upgradation in their own field.

#### 2. Academic bank of credits (ABC):

The Academic Bank of Credits (ABC) serves as an essential platform for streamlining the credits earned by the students through online and offline. ABC allows the students to transfer their attained skills and experiences effortlessly, ensuring their lifelong learning. ABC helps the students to accumulate their academic credits and transfer the credits across different institutions and empowering them to pursue different educational pathways without any barriers. This innovative methodology provides flexibility in learning and promotes the integration of learning in academic frameworks. ABC enriches students' learning journey and prepares them more inclusively for their future accomplishments. APAAR, which stands for Automated Permanent Academic Account Registry, is a specialized identification system designed for all students in India. This initiative is part of the 'One Nation, One Student ID' program launched by the Union government, aligning with the new National Education Policy of 2020. Linked to the Academic Bank of Credits (ABC) via the APAAR/ABC ID, it receives academic credits from institutions through the National Academic Depository. APAAR ensures accountability and transparency in education by tracking student progress and streamlining academic records. SJCET insist every student to register and have a APAAR/ABC ID. The registration enables students to easily share their academic records for enriched access to opportunities.

#### 3. Skill development:

The institute has established the skill development among the students through Placement & Training Cell and Industry Institute Interaction Cell.

Placement & Training Cell arranges On Campus and Off Campus Placement Drives, Internships, Industrial Visits, Implant Training, Soft skills Training,

Technical Training and Company Specific Training for the betterment of students. Placement & Training Cell of SJCET signed MOU's with International and National Companies to train the students according to the Industrial need. Placement & Training Cell and Industry Institute Interaction Cell of SJCET organizes employability enhancement programmes for the skill development of the students. Naan Muthalvan and Nalayathiran schemes are introduced by the Government for the skill enhancement of the students. Students are encouraged to enrolled in SWAYAM-NPTEL online courses for the Skill Development.

4. Appropriate integration of Indian Knowledge system (teaching in Indian Language, culture, using online course):

The NEP 2020 emphasizes enhancing the promotion of Indian languages, arts, and culture, highlighting India's rich cultural and knowledge heritage. It underscores the importance of Indian philosophy in shaping global perspectives and influencing world events. Recognizing the multicultural and multilingual background of the country, there is a strong call to revitalize these aspects for the benefit of India and the world. This approach necessitates a significant shift from our recent educational practices, which have often neglected traditional Indian knowledge. In accordance with Anna University guidelines, our institution has introduced a mandatory course titled "Heritage of Tamils" and "Tamils and Technology" for all undergraduate students. To supplement classroom lectures, students have received standard textbooks on the Heritage of Tamils, Tamils and Technology to enhance our Tamil culture. The Fine Arts Club actively organizes competitions in Tamil, focusing on contemporary topics such as environment and energy conservation, as well as themes reflecting India's cultural and ethnic diversity.

5. Focus on Outcome based education (OBE):

Outcome based education (OBE) is a student's centric instruction model that focuses on measuring the student performance through outcomes.

Outcomes include knowledge, skills and attitudes.

Outcome-based education is a method of learning that focuses on helping the students to accomplish specific goals at the end of the programme. These goals are practical, simple, measurable and time bounded outcomes that can be achievable effectively by students through innovative assessments. In the OBE model, the required knowledge and skill sets for

a particular engineering degree is predetermined and the students are evaluated for all the required parameters by stating the knowledge, skill and behavior of the graduate expected to attain upon the completion of a program and after 5 years of graduation. 6. Distance education/online education: Now a days Online Education becomes the essential part of Modern Teaching and Learning Process. The digital platforms like Google Classroom, Zoom, Google Meet, Webex and Microsoft teams are widely used for knowledge sharing. All the academic process including online class, test papers, assignments and seminar/MCQ submissions were efficiently done through these platforms. Further, several Faculty Development Programmes, Webinars, Invited External Guest Lectures and Competitions were also conducted using these digital platforms. Digital platforms are also being used to share the Study Materials with the students. The college encourages the students and faculty to take up online certificate courses offered by SWAYAM-NPTEL and MOOCs

students.

#### **Institutional Initiatives for Electoral Literacy**

1. Whether Electoral Literacy Club (ELC) has been set up in the College?

SJCET has actively functioning Electoral Literacy Club. The goal of the Electoral Literacy Club is to raise awareness among students about electoral procedures and the value of actively participating in elections. The club aims to educate students about democratic values, voting rights and the significance of voting through interesting activities and programmes. Activities are designed to encourage and motivate students provoking them to think and ask questions. In order to raise awareness about voting, the club works along with the government and invite government officials as chief guests for various awareness programmes. Students are encouraged to participates in the club events on a

from 2019. Up to now 83 NPTEL certificates are received by the faculty and 42 NPTEL certificates are received by the students. The credits earned from SWAYAM-NPTEL are considered as replacements of elective courses using Credit Transfer Scheme as per the Anna University were applicable to the

2. Whether students' co-ordinator and co-ordinating faculty members are appointed by the College and whether the ELCs are functional? Whether the ELCs are representative in character?

Every semester conducts varied students to know encourage the elections. The part in all the othis will help to confidence. Or participated in Mr.M.Sureshk Members Mr.

Ms.S.Sheela, A students in variety of the part in the part i

Every semester NSS unit and ELCs of SJCET conducts various awareness programmes to help the students to know about their voting rights and encourage them to actively participate in the elections. The club also encourages students to take part in all the competitions conducted by college as this will help them to develop their skills and confidence. Our students and staff have actively participated in the competitions. Our staff coordinator Mr.M.Sureshkumar, AP/MECH and the Internal Members Mr. G.Deepak Kumaran, AP/ECE and Ms.S.Sheela, AP/EEE has actively involved the students in various innovative activities. Student Representatives Mr.A.Bovas Praveen and Ms. C.Srikayalvizhi encourage the students to use their voting rights and spread awareness about the importance of voting among the students and general public.

3. What innovative programmes and initiatives undertaken by the ELCs? These may include voluntary contribution by the students in electoral processes-participation in voter registration of students and communities where they come from, assisting district election administration in conduct of poll, voter awareness campaigns, promotion of ethical voting, enhancing participation of the under privileged sections of society especially transgender, commercial sex workers, disabled persons, senior citizens, etc.

NSS unit and ELCs of SJCET assist the district election administration by sending the student voluntaries to smooth conduction of polls which includes assisting the polling officers, setting up polling booths, managing the peoples with disability, senior citizens and ensuring the smooth conduct of elections.

4. Any socially relevant projects/initiatives taken by College in electoral related issues especially research projects, surveys, awareness drives, creating content, publications highlighting their contribution to advancing democratic values and participation in electoral processes, etc.

NSS unit and ELCs of SJCET organizes voter awareness rally to educate students and public about the importance of voting, the electoral process, and the role of citizens in a democracy by issuing the brochures and keeping the placards. NSS unit and ELCs of SJCET promote ethical voting practices and discourage malpractice such as vote-buying.

5. Extent of students above 18 years who are yet to be enrolled as voters in the electoral roll and efforts by ELCs as well as efforts by the College to institutionalize mechanisms to register eligible students as voters.

NSS unit and ELCs of SJCET organizes Voter Registration Drive in collaboration with District Election Administration for new voters. Voter Registration Drive encourages the new voter's registration in the age group of 18 and above.

## **Extended Profile**

#### 1 Students

#### 1.1

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

2022-23	2021-22	2020-21	2019-20	2018-19
643	499	526	666	1013

File Description	Document
Upload Supporting Document	<u>View Document</u>
Institutional data in prescribed format	View Document

## 2 Teachers

## 2.1

### Number of teaching staff / full time teachers during the last five years (Without repeat count):

Response: 258

8	File Description	Document
	Upload Supporting Document	View Document
	Institutional data in prescribed format	View Document

#### 2.2

## Number of teaching staff / full time teachers year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
78	85	102	122	123

## 3 Institution

#### 3.1

## Expenditure excluding salary component year wise during the last five years (INR in lakhs)

2022-23	2021-22	2020-21	2019-20	2018-19
230.45	133.57	123.49	152.04	170.74

File Description	Document
Upload Supporting Document	<u>View Document</u>

## 4. Quality Indicator Framework(QIF)

## **Criterion 1 - Curricular Aspects**

#### 1.1 Curricular Planning and Implementation

#### 1.1.1

The Institution ensures effective curriculum planning and delivery through a well-planned and documented process including Academic calendar and conduct of continuous internal Assessment

#### **Response:**

St. Joseph's College of Engineering and Technology has a well-defined planning and implementation process for the effective delivery of the curriculum framed by Anna University, Chennai to which it is affiliated. Internal Quality Assurance Cell (IQAC) prepares the academic calendar of the college in-line with the Anna University academic schedule and the corresponding departments prepare their departmental academic calendars. All the faculty members are explained briefly about the academic activities at the starting of every semester. Head of the Department allotted the theory and practical courses based on the expertise of individual teacher. Faculty members prepare teaching plan for theory and practical courses at the beginning of every semester. Every week department meetings were conducted to discuss about the course delivery and syllabus completion status. IQAC prepares a general timetable and HOD of concerned departments prepare departmental timetable. Teachers conduct classes according to the timetable.

The college provides integrate classroom with various ICT tools and encourages the students to do research projects, internship and implant trainings. Teacher uses participative, problem solving, interactive and student-centric learning pedagogy for effective curriculum delivery. The college organizes guest lectures, expert lectures of eminent academicians, for the effective curriculum delivery and to enhance the subject knowledge of the students. College provides extra guidance to the slow learners through remedial classes. Besides this, the college has a mentoring system for dealing the academic-related issues. All the events reports are maintained by each department as well as in the IQAC. College library is having a good collection of books. College provides internet connectivity through LAN and Wi-Fi to the teachers for enhancing the teaching-learning process.

Internal Assessment and Class tests are conducted to check whether the students have acquired knowledge as outlined in the objectives of the curriculum. All examinations are conducted according to the Academic Calendar. Tutorials are conducted regularly and the faculty continuously monitor the progress of the students. Special classes are conducted for slow learners and they are insisted to practice previous year University Question papers. Advance learners are encouraged to undergo online courses like SWAYAM, NPTEL, MOOC, etc to improve their performance. Record of the regular attendance, mark lists and progress of the students are maintained and preserved by the respective departments and also in IQAC.

The college encourage faculty members to attend FDP, STTP courses, webinar, workshops and present papers in conferences conducted by the affiliating and other Universities for acquiring necessary skills for effective delivery of the curriculum. Participation certificates of all the attended courses by faculty members are submitted to IQAC for documentation. The Academic Committee spearheaded by the

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Principal, along with the Heads of Departments regularly monitor the course coverage and effective delivery of the curriculum through student feedback and performance in CIAT and implements corrective measures based on the needs.

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

#### 1.2 Academic Flexibility

#### 1.2.1

Number of Certificate/Value added courses offered and online courses of MOOCs, SWAYAM, NPTEL etc. (where the students of the institution have enrolled and successfully completed during the last five years)

**Response:** 65

File Description	Document	
List of students and the attendance sheet for the above mentioned programs	View Document	
Institutional programme brochure/notice for Certificate/Value added programs with course modules and outcomes	View Document	
Institutional data in the prescribed format	View Document	
Evidence of course completion, like course completion certificate etc. Apart from the above:	View Document	
Provide Links for any other relevant document to support the claim (if any)	View Document	

#### 1.2.2

Percentage of students enrolled in Certificate/ Value added courses and also completed online courses of MOOCs, SWAYAM, NPTEL etc. as against the total number of students during the last five years

Response: 98.33

1.2.2.1 Number of students enrolled in Certificate/ Value added courses and also completed online courses of MOOCs, SWAYAM, NPTEL etc. as against the total number of students during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
641	495	481	666	1008

File Description	Document	
Upload supporting document	View Document	
Institutional data in the prescribed format	View Document	

#### 1.3 Curriculum Enrichment

#### 1.3.1

Institution integrates crosscutting issues relevant to Professional Ethics, Gender, Human Values, Environment and Sustainability in transacting the Curriculum

#### **Response:**

#### 1. Gender

Various programs are organized for women and girl students such as conduction of Hb level check up and Eye check up camps, dance competition, Singing Competition, etc. The Woman's grievances cell will address the Anti harassment issues and internal complaint against women. WWC (Women Welfare Club) organizes programs on Women Empowerment, Laws for Woman, Women's Day. The NSS and YRC unit of our college has been very effectively conducting various extension activities not only in college premises but also for the benefit of the Public. Major gender issues are focused and addressed through the activities like save girl child campaign, Awareness Rally, Essay and poster exhibitions and paper presentations, etc. Enriching girl students by providing training on Mushroom cultivation, Soap and Shampoo making. WWC effectively conducts program on YOGA and Meditation for womens to lead healthy and stress free life.

#### 2. Environment and Sustainability

NSS promotes environmental protection through tree plantation and other sustainable development programs. Every semester, NSS unit undertakes various activities in the nearby villages during the special camps. In these camps, NSS organizes various environment related programs including tree plantation, Awareness rally, plastic free drive, Poster Competition, Debate Competition, etc. Various activities like quiz and poster competitions, invited talks are organized to create awareness about nature, biodiversity, environment and sustainability. Different activities have been initiated by the college to save environment such as Cleanliness Campaigns at Temple places, Bus Stand and Public places etc. Eco Club of the college organized programs like cleaning ponds, watering plant and tree planting, etc. Eco Club Celebrates various days like World Environment Day, NSS Day, world ozone day, etc. The NSS unit of the college has taken initiative under Swachch Bharat scheme for cleaning and sapling of trees.

#### 3. Human Values and Professional Ethics

The college takes efforts for integration of ethical and human values through extra-curricular activities also. The college NSS and YRC units creates scientific approach and social awareness among the students through lectures, quiz competitions, essay writing, awareness rally, etc. Programs conducted under NSS and YRC units helps to inculcate human values and value addition among students. National festivals like Independence Day and Republic Day serve as a platform to develop patriotic and moral values. Various social activities like Health and Hygiene awareness programs, Medical check-up camps, AIDS awareness programs, Voter's awareness program, Anti Tobacco awareness program, Road safety Campaign, Blood donation camps, etc were organized through various clubs.

File Description	Document	
Upload Additional information	<u>View Document</u>	
Provide Link for Additional information	<u>View Document</u>	

#### 1.3.2

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

Response: 97.67

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

Response: 628

File Description	Document	
Upload supporting document	<u>View Document</u>	
Institutional data in the prescribed format	View Document	

## 1.4 Feedback System

#### 1.4.1

Institution obtains feedback on the academic performance and ambience of the institution from various stakeholders, such as Students, Teachers, Employers, Alumni etc. and action taken report on the feedback is made available on institutional website

**Response:** A. Feedback collected, analysed, action taken& communicated to the relevant bodies and feedback hosted on the institutional website

File Description	Document
Feedback analysis report submitted to appropriate bodies	View Document
At least 4 filled-in feedback form from different stake holders like Students, Teachers, Employers, Alumni etc.	View Document
Action taken report on the feedback analysis	<u>View Document</u>
Link of institution's website where comprehensive feedback, its analytics and action taken report are hosted	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

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

#### 2.1 Student Enrollment and Profile

#### 2.1.1

#### **Enrolment percentage**

Response: 39.38

# 2.1.1.1 Number of seats filled year wise during last five years (Only first year admissions to be considered)

2022-23	2021-22	2020-21	2019-20	2018-19
237	198	178	73	115

#### 2.1.1.2 Number of sanctioned seats year wise during last five years

2022-23	2021-22	2020-21	2019-20	2018-19
330	300	360	420	624

File Description	Document
Institutional data in the prescribed format	<u>View Document</u>
Final admission list as published by the HEI and endorsed by the competent authority	View Document
Document related to sanction of intake from affiliating University/ Government/statutory body for first year's students only.	View Document

#### 2.1.2

Percentage of seats filled against reserved categories (SC, ST, OBC etc.) as per applicable reservation policy for the first year admission during the last five years

Response: 49.96

# 2.1.2.1 Number of actual students admitted from the reserved categories year wise during last five years (Exclusive of supernumerary seats)

2022-23	2021-22	2020-21	2019-20	2018-19
187	166	160	72	115

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

2022-23	2021-22	2020-21	2019-20	2018-19
227	206	247	290	431

File Description	Document
Institutional data in the prescribed format	<u>View Document</u>
Final admission list indicating the category as published by the HEI and endorsed by the competent authority.	View Document
Copy of communication issued by state govt. or Central Government indicating the reserved categories(SC,ST,OBC,Divyangjan,etc.) to be considered as per the state rule (Translated copy in English to be provided as applicable)	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

#### 2.2 Student Teacher Ratio

#### 2.2.1

Student – Full time Teacher Ratio (Data for the latest completed academic year)

Response: 8.24

## **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 and teachers use ICT- enabled tools including online resources for effective teaching and learning process

#### **Response:**

Experiential learning, participative learning, life-long learning, problem solving and active learning methods are used to enhance learning experiences. The teaching-learning process in the institution consists of lectures, tutorials, practical sessions, projects, seminars, mini projects, internships, industrial visits, and so on. The institution provides facilities like Internet, LCD projectors, multimedia tools, etc. to facilitate the student centric methods. Online platforms, software tools are also used to augment the teaching-learning process.

#### **Experiential learning:**

Real knowledge is acquired only through first-hand experience. Experiential learning is provided to the students through laboratory sessions, internships, inplant training and by way of hands-on trainings in workshops organized within and outside the college. The institution encourages students for internships to enable them to have a real feel of industry environment. Students gain knowledge in latest technology by attending inplant training and hands-on workshops for a short period of time.

#### Participative learning:

Participatory Learning Technique (PLT) is a way of organizing the classroom that motivates learners to participate in the act of teaching, a peer-based learning process. Student Seminar Presentation (SSP) is conducted every semester to gain knowledge in recent technology. Students disseminate their knowledge gained through workshop, conference, etc. to their peers. Students interact and learn from each other. Participative learning is encouraged through paper presentations, poster presentations, participation in technical events. The institution encourages students to take part in various technical events. Students act as volunteers in department and institutional level workshops, seminars, symposiums, conferences, etc. Students understands the gap between academic and industry by Alumni Interactions. Technical club activities develop leadership skills involving communication, problem solving and decision making.

#### **Problem Solving:**

Problem solving capabilities are inculcated to the students to develop the ability to apply problem solving skills when faced with issues or problems that are prevalent now. The development and use of problem-solving skills helps learning. Problem solving exposure is given to students through case studies, tutorials, assignments, and projects.

#### **Life-long learning:**

Independent learning is encouraged through assignments, seminars and self-study components. Students are motivated to take NPTEL courses for better understanding of the courses. Innovative methods like learning by doing in special labs, undertaking mini research projects etc. will develop the attitude for lifelong-learning.

#### **Active learning using ICT tools**

ICT-based lecture halls enable interactive learning in the classroom. Google classroom is created for each and every subject for all the classes. Camu the ERP software offers an Integrated Student Information System (SIS) and Learning Management System (LMS) with a framework to easily adopt modern

learning concepts such as Outcome-Based Education (OBE), Competency-based learning and the Flexible Choice Based Credit System (CBCS). Faculty members use active learning methods such as think pair share, discussions, debates, role plays, quizzes, etc. during the delivery of lectures. These methods along with the other features of the teaching-learning process at the institution enable higher order thinking skills in the students. Flipped classrooms enhance student learning and achievement by reversing the traditional model of a classroom, focusing class time on student understanding rather than on lecture.

File Description	Document
Upload Additional information	<u>View Document</u>
Provide Link for Additional information	<u>View Document</u>

#### 2.4 Teacher Profile and Quality

#### 2.4.1

Percentage of full-time teachers against sanctioned posts during the last five years

Response: 100

#### 2.4.1.1 Number of sanctioned posts year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
78	85	102	122	123

File Description	Document
Sanction letters indicating number of posts sanctioned by the competent authority (including Management sanctioned posts)	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

#### 2.4.2

Percentage of full time teachers with NET/SET/SLET/Ph. D./D.Sc. / D.Litt./L.L.D. during the last five years (consider only highest degree for count)

Response: 15.69

#### 2.4.2.1 Number of full time teachers with NET/SET/SLET/Ph. D./ D.Sc. / D.Litt./L.L.D year wise

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#### during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
18	14	15	18	15

File Description	Document
List of faculties having Ph. D. / D.Sc. / D.Litt./ L.L.D along with particulars of degree awarding university, subject and the year of award per academic year.	View Document
Institution data in the prescribed format	View Document
Copies of Ph.D./D.Sc / D.Litt./ L.L.D awareded by UGC recognized universities	View Document

## 2.5 Evaluation Process and Reforms

#### 2.5.1

Mechanism of internal/ external assessment is transparent and the grievance redressal system is time-bound and efficient

#### **Response:**

The college has an exclusive Examination Cell headed by a Professor (Exam cell coordinator) for overseeing the conduct of all the internal and external examinations. The exam cell coordinator is assisted by a team consisting of one faculty from each department (Department Exam cell in-charge) and supporting staff members. Students are evaluated based on their performance in the Continuous Internal Assessment Test (CIAT).

The college academic schedule is prepared based on the affiliating Anna University schedule, which provides information on the examination dates for continuous internal assessment and the same is circulated among students so that students can plan their course of action accordingly.

#### **Adaptation of Outcome Based Education (OBE) Framework:**

Question papers are set in line with the requirements of OBE (Blooms Taxonomy pyramid). The questions are also mapped with relevant Course Outcomes (COs) stated for the respective courses.

The faculty evaluates the answer-scripts and the evaluated answer scripts are randomly verified by the senior faculty members / HOD and distributed to the students within two days of the conduct of examination. The faculty members will enter the marks in the ERP portal. The entries made in the portal are cross verified by the year in-charges/counsellors while doing their result analysis. The consolidated

mark statements pertaining to the class is displayed in the class notice board. The user name and password for the student login of the ERP portal is provided to each student at the time of joining the institution. Both parents and students can view the performance in IAT. The internal marks for each course based on the assessments 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 portal using their login credentials. The internal evaluation of theory courses is planned in the following way:

<b>Continuous Internal</b>	Portions	<b>Evaluation Process</b>	Maximum Marks
<b>Assessment Test (CIAT</b>			
CIAT I	Unit I & II	Internal Evaluation	100 (Converted to 60) +
CIAT II	Unit III & IV	Internal Evaluation	40 marks as specified by
Model Exam	All 5 Units	Internal Evaluation	the regulation

The obtained CIAT mark (out of 100) is scaled down to 20 marks. The external evaluation of theory courses is conducted by the schedule of Anna University for all the 5 units for a total of 100 marks which is scaled down to 80 / 60 marks as per the regulation. The final mark obtained is the sum of the above two scaled down marks. For practical courses, the performance of students is assessed based upon their performance in the regular practical sessions and model practical examination. For Theory cum Lab courses, the performance of students is assessed based upon their performance in the CIAT I and regular practical sessions and model practical examination. For project work (Final year, Eighth semester) the performance of students is assessed based on subsequent reviews such as Zeroth Review, Project Review-I, Project Review-II and Model Viva Voce examination.

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

#### 2.6 Student Performance and Learning Outcomes

#### 2.6.1

Programme Outcomes (POs) and Course Outcomes (COs) for all Programmes offered by the institution are stated and displayed on website

#### **Response:**

Faculty members prepare the course information, course materials and the lab manuals to be sent to the students before the commencement of the academic sessions.

The initial draft of PEOs, PSOs and POs is prepared by the head of the department, the academic

coordinator and senior faculty members of the department, based on the Vision/Mission of the department, feedback from internal and external stakeholders and the graduate attributes. The final version is placed before the Governing Council Meeting (GCM) for discussion. The suggestions given by the members of the GCM are incorporated and the refined PEOs, PSOs and POs are submitted to the Standing Committee of the Academic Council to pass it to the Academic Council Meeting (ACM). The suggestions given by the members of the Academic Council are incorporated and the final version of the PEOs, PSOs and POs are published and disseminated to the internal and external stakeholders.

The UGC's standards on Graduate Attributes, together with the College's Vision, Mission, and Strategies, were taken into consideration when formulating the Programme Outcomes (PO). The College took into account a number of factors when creating POs, including the creation of livelihoods, research potency, human values, and current employment trends. Other proposals from stakeholders, including alumni, were also considered. After professional consultation, the entire curriculum was reorganized, and the assessment methodology was changed. The concerned course instructors, the college website, hand-outs and orientation all provided the students with information on the PO pattern.

The relevant Departments create the Programme Specific Outcomes (PSO) based on their own program scope, vision, and mission. The Department develops the Course Outcomes (CO) after consulting with the course instructors and taking into account the anticipated levels of cognitive, emotional, and psychomotor learning.

The course in charge may, with the consent of the relevant HoD and senior academics, alter or reframe the COs, even if they are provided by Anna University together with the syllabus. During the introductory class, students are informed about COs.

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

#### 2.6.2

Attainment of POs and COs are evaluated.

#### Explain with evidence in a maximum of 500 words

#### **Response:**

Course Outcomes are statements on what the students will be expected to attain at the end of the course. The number of course outcomes may vary from 2 to 6. It is desirable to associate an approximate number of classroom sessions with each Course Outcome.

For example, 2-credit course has about 30 classroom sessions 3-credit course has about 45 classroom sessions Attainment of COs of the Course in Outcome Based Education (OBE), Course outcome attainment is evaluated by direct assessment tools.

#### **Direct Assessment:**

The direct method of assessment includes Monthly tests, Tutorials, Assignments, Quiz, Mini Project, Seminar and Technical Presentation, etc. Assessment Pattern.

All assessment components in Direct/Indirect assessment instruments are to be tagged with Cognitive Level (CL) Course Outcome (CO) Marks Sample Assessment Pattern for all the concerned CIA Instruments(Assuming 50% Weightage for CIA) is indicated.

#### **Indirect Assessment:**

Employer, alumni, and course end surveys are the sources of data used in the Indirect Assessment method, which is a quantifiable student performance indicator.

#### **Setting CO Attainment Targets:**

Targets are fixed for all the COs of a course. For example, the target can be "the class average marks >70 marks". It provides considerable details which can lead to specific plans for an improvement. Setting targets for Course Outcomes Targets are set for each CO of a course separately Attainment Gap During the assessment process, when there are no attainment gaps or attainment gaps are negative it is expected that the instructor will enhance the CO target next time he/she offers the course.

Measuring Course Outcomes attained through Semester End Examinations (SEE) and Continuous Internal Assessment Test (CIAT) Attainment of COs is directly measured from the performance of students in Continuous Internal Assessment Test (CIAT) and from the course marks of students in Semester End Examinations (SEE). The attainment level of each course is fixed in the range (60%-90%) based on the difficulty on students' perspective to attain more than or equal to attainment marks. For assessing the attainment of course outcomes in internal components, each CO of the course is mapped to individual questions. For Semester End Examination, the attainment of individual COs cannot be assessed as it is not accessible by the department. So, the percentage of students attained more than or equal to the attainment of marks in SEE is considered as attainment of all the COs of that course.

#### Attainment Analysis and necessary remedial measures:

Analysis is done to check if POs and PSOs are attained. In case of attainment, the process of content delivery continues. In case of non-attainment, reasons are analyzed and necessary changes are incorporated in content delivery and assessments. In case of non-attainment for 3 consecutive years, modification in curriculum and syllabi is carried out as a corrective measure.

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

2.6.3

#### Pass percentage of Students during last five years (excluding backlog students)

**Response:** 76.03

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

2022-23	2021-22	2020-21	2019-20	2018-19
89	65	213	259	202

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

2022-23	2021-22	2020-21	2019-20	2018-19
101	89	213	312	374

File Description	Document
Institutional data in the prescribed format	View Document
Certified report from Controller Examination of the affiliating university indicating pass percentage of students of the final year (final semester) eligible for the degree programwise / year-wise.	View Document
Annual report of controller of Examinations(COE) highlighting the pass percentage of final year students	View Document

## 2.7 Student Satisfaction Survey

#### 2.7.1

#### Online student satisfaction survey regarding teaching learning process

**Response:** 3.71

File Description	Document
Upload database of all students on roll as per 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 in the institution during the last five years (INR in Lakhs)

#### **Response:** 3

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

2022-23	2021-22	2020-21	2019-20	2018-19
1.0	0.75	0	1.25	0

File Description	Document	
Upload supporting document	View Document	
Institutional data in the prescribed format	<u>View Document</u>	

### 3.2 Innovation Ecosystem

#### 3.2.1

Institution has created an ecosystem for innovations, Indian Knowledge System (IKS),including awareness about IPR, establishment of IPR cell, Incubation centre and other initiatives for the creation and transfer of knowledge/technology and the outcomes of the same are evident

#### **Response:**

St.Joseph's College of Engineering and Technology (SJCET) has built the research ecosystem for research and development, innovation, knowledge generation, knowledge transfer, and skill development of the students and faculty members. The developed ecosystem intends to promote Research and Innovation through the R&D cell, develop essential human resources and entrepreneurial skills through the Entrepreneurship Development Cell (EDC), and focus on the creation and dissemination of knowledge through well established infrastructure. SJCET has signed MOUs with various industries and organizations to organize numerous skill development programmes aimed at fostering entrepreneurship among the students. The academic and research capabilities of SJCET consistently contribute to the innovation ecosystem and motivate the students to become entrepreneurs by providing innovative solutions to real-world problems. Entrepreneur Development Cell has been conducting several awareness program, technical training program and entrepreneur program to study real time challenges using agile method. Each department has incubation centre to foster innovation and research culture

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among students to do their projects. Following are the key initiatives of SJCET in research activities.

SJCET fosters a research culture through academic efforts such as establishing an Institute Innovation Council (IIC), helps the students to attend an innovative training programme and promoting them for research activities like toycathon 2021 and Smart India Hackathon. Innovative activities are performed through co-curricular activities organized by the department students' associations. The research oriented events are organized for faculty and students by the Research and Development (R&D) cell. Also, students and faculty are being educated about the need of filing patents and obtaining Intellectual Property Rights (IPR) for their innovations. Department heads has taken the effort to sign memorandum of understanding (MOUs) with national institutions and industry to enhance research activity.

SJCET Incubation Center nurture a culture of entrepreneurship in the creative minds of young engineers, so that their ideas are implemented into newer products or services that have marketing potential. Students from all branches work in collaboration at Incubation Center. The primary purpose of the incubation center is to facilitate the creation of ideas and inventions that benefit society and importantly, are commercially ready by the end of incubation program

SJCET has established the knowledge generation, transfer ecosystem including an Incubation Centre through the various centers. To achieve the goal, to become as the entrepreneurship start up and ideation hub, SJCET has signed the MOUs with various firms, to conduct various skill development programs in turn achieve the goal to make the students as entrepreneur. Through innovative ideas and suggestions for solving pressing issues, the academic and research capabilities of SJCET continuously contribute to the Innovation Ecosystem and inspire students to become entrepreneurs

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

#### 3.2.2

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

**Response:** 56

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

2022-23	2021-22	2020-21	2019-20	2018-19
13	20	9	7	7

File Description	Document	
Upload supporting document	View Document	
Institutional data in the prescribed format	View Document	

#### 3.3 Research Publications and Awards

#### 3.3.1

Number of research papers published per teacher in the Journals notified on UGC care list during the last five years

Response: 0.03

# 3.3.1.1 Number of research papers in the Journals notified on UGC CARE list year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
3	5	0	0	0

File Description	Document
Links to the papers published in journals listed in UGC CARE list or	View Document
Institutional data in the prescribed format	<u>View Document</u>

#### 3.3.2

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: 0.06

# 3.3.2.1 Total number of books and chapters in edited volumes/books published and papers in national/ international conference proceedings year wise during last five years

2022-23	2021-22	2020-21	2019-20	2018-19
3	8	1	1	2

File Description	Document
List of chapter/book along with the links redirecting to the source website	View Document
Institutional data in the prescribed format	View Document
Copy of the Cover page, content page and first page of the publication indicating ISBN number and year of publication for books/chapters	View Document

## 3.4 Extension Activities

#### 3.4.1

Outcomes of Extension activities in the neighborhood community in terms of impact and sensitizing the students to social issues for their holistic development during the last five years.

#### **Response:**

St.Joseph's College of Engineering and Technology (SJCET) promotes regular engagement of faculty, students and staff with neighbourhood community for their holistic development and sustained community development through various activities. The college motivates the student's social participation and also drives to achieve its goal of providing higher technical education to create equitable society with ethical values.

The college is continuously organizing a number of extensions and outreach activities which are directly connected with students academic, social, cultural, community services etc., and the college management with the help of many voluntary organizations and NGOs organizes the outreach programs.

And our College provides the major extension and outreach programmes organized under the banner of National Service Scheme of the College with the details of faculty and student participation. The NSS student volunteers used to visit villages and extend their services regularly. The NSS volunteers used to organize blood donation camp, free eye screening camp, free medical checkup camp, general awareness camp, rally for social awareness, cleaning the nearby villages, etc.

The activities conducted lead imbibing the values of social responsibility such as:

- To promote cleanliness in all span of life and common places, Juggi areas.
- To acquire social values and a deep interest in environmental related issues.
- Enlarge the knowledge of societal issues and problems and to search solution by getting involved with their lives.
- Build up relation and tie up with organizations/NGO to carry forward humanitarian work in future.

The Following Extension Activities are done by SJCET,

Blood donation camps

- Tree planting Cleanliness campaigns in Campus
- Awareness programs
- Swacch Bharat
- Disease Prevention (Dengue, Cancer, and Seasonal Diseases)
- Usage Environmental Safety and pollution
- Medicine and Health care Programs Like Eye camp, General Medical Camps
- Disaster Management Programs
- Government Services Like Election Trainings, Career Guidance Programs Science Expo
- Independence and Republic day celebrations

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

#### 3.4.2

# Awards and recognitions received for extension activities from government / government recognised bodies

#### **Response:**

Extension Activities refer to activities that engineering colleges undertake to serve the society and community beyond their academic and research mandates. These activities are aimed at creating social awareness, building community relations, promoting Social justice and contributing to the overall Welfare of society.

St.Joseph's College of Engineering and Technology encourages staff and students to actively participate in programs involving social issues, for their holistic development. Our Institute work with neighboring community and carries out a range of extension programs to help on the needs of neighborhood under various schemes.

- National Service Scheme (NSS)
- Youth Red Cross (YRC)

The various social issues addressed by our NSS volunteers include, Youth for Clean India, Pollution Awareness Program, Medical Camp, Blood Donation Camp, Tree Plantation Program. Several Community sensitization social issues are also addressed by our NSS volunteers which include, Rally for environmental awareness, Election awareness program, Covid-19 awareness Program, Plastic Removal for Fit India.

The campus cleaning campaign is also done by our NSS volunteers for maintaining the campus green, clean and offering an eco-friendly environment to all its stakeholders.

Through these extension activities our college has received awards and recognitions from various

governments and government recognized bodies, these include

- Certificate of appreciation from Our Lady Hospital, Thanjavur for extended support to conduct the blood donation camp.
- Certificate of recognized presented to St. Joseph's College of Engineering and Technology in Awareness of Controlling HIV at Thanjavur, for extended support to conduct the camp.
- Certificate of appreciation by Thai Moogambigai Dental Hospital to conduct free Dental Camp for the Benefit of in and around area of Elupatti Society.
- Certificate of appreciation by Aravind Eye Hospital for organizing free Camp on Our Institution as part of the Sponsorship by our Institution to conduct free Eye Camp.
- Certificate of appreciation on Women's Safety Awareness Program conducted at Sri Srinivasa High School with St. Joseph's college of engineering and technology students.

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

#### 3.4.3

Number of extension and outreach programs conducted by the institution through organized forums including NSS/NCC with involvement of community during the last five years.

#### **Response:** 54

# 3.4.3.1 Number of extension and outreach Programs conducted in collaboration with industry, community, and Non- Government Organizations through NSS/ NCC etc., year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
17	10	5	17	5

File Description	Document
Photographs and any other supporting document of relevance should have proper captions and dates.	View Document
Institutional data in the prescribed format	View Document
Detailed report for each extension and outreach program to be made available, with specific mention of number of students participated and the details of the collaborating agency	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

#### 3.5 Collaboration

#### 3.5.1

Number of functional MoUs/linkages with institutions/industries in India and abroad for internship, on-the-job training, project work, student / faculty exchange and collaborative research during the last five years.

**Response:** 29

File Description	Document
Summary of the functional MoUs/linkage/collaboration indicating start date, end date, nature of collaboration etc.	View Document
List and Copies of documents indicating the functional MoUs/linkage/collaborations activitywise and year-wise	View Document
Institutional data in the prescribed format	View Document

## **Criterion 4 - Infrastructure and Learning Resources**

#### 4.1 Physical Facilities

#### 4.1.1

The Institution has adequate infrastructure and other facilities for,

- teaching learning, viz., classrooms, laboratories, computing equipment etc
- ICT enabled facilities such as smart class, LMS etc.

Facilities for Cultural and sports activities, yoga centre, games (indoor and outdoor), Gymnasium, auditorium etc (Describe the adequacy of facilities in maximum of 500 words.)

#### **Response:**

St. Joseph's College of Engineering and Technology stands as a beacon of brilliance in the realm of higher learning, characterized by its expansive campus that spans an area of 15.45 acres and boasts a meticulously designed built-up space of 57,829.09 square meters. This distinguished institution takes great pride in its comprehensive infrastructure, which is meticulously crafted to cultivate an environment that fosters innovation, collaboration, and proficiency among its students. This setup is designed to prepare students to tackle global challenges and emerge as significant contributors to contemporary society. With a strong conviction in the transformative potential of well-equipped facilities, the college places a primary emphasis on creating a vibrant educational atmosphere that nurtures capable, self-assured, and accountable engineering graduates.

The uninterrupted power supply of 24 KVA and water supply further supports this learning environment. The college posses generator of 100 KVA and 250 KVA. We have seven seminar halls, 1 conference hall, and computer environments with computer labs in each department and a separate auditorium with a capacity of 1000 people. A yoga routine can reduce stress, improve flexibility, sharpen focus and give you more energy. Improved status and general well-being. Featuring state-of-the-art ICT tools in the classroom, including ERP, video lectures, study guides, and quizzes. Affiliated with Anna University, all research projects are accurately arranged to comply with college regulations, and research centre equipment exceeds suggested requirements. The facility provides additional labs so that students can be exposed to research and advancements, along with approved programming for processing requirements. The campus is packed with multi-story buildings that has 29 laboratories, 38 classrooms, dining areas, placement and training centres, large auditoriums, a library, cafeteria, and hostels, all thoughtfully designed to facilitate effective knowledge transfer.

The classrooms are equipped with the latest technology, including smart classrooms, ERP systems, video lecture halls, learning materials, and quiz platforms. A reliable internet access is ensured by strong network of computer systems that are connected to internet with high bandwidth of 50 mbps and SOPHOS firewall. The campus is also equipped with Wi-Fi hotspots, strategically placed to enhance accessibility.

The main library along with departmental libraries, houses an extensive collection of books and digital resources, aiding students in their academic endeavours. The college also provides access to a digital library, offering a wealth of online resources. The institution is home to well-equipped auditoriums and

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seminar halls, furnished faculty residences, purified water dispensers, and CCTV surveillance for enhanced security. Best transportation services are available including a bus fleet for the convenience of both students and staff in surrounding areas. To promote the physical fitness of the students, college provide top-notch sports facilities including a gymnasium equipped with advanced equipment. Cultural events are regularly organized to encourage student enrolment and foster talent in various artistic forms. The institute is still committed to producing a new generation of knowledgeable, kind and experts with a global perspective.

File Description	Document
Upload Additional information	<u>View Document</u>
Provide Link for Additional information	<u>View Document</u>

#### 4.1.2

Percentage of expenditure for infrastructure development and augmentation excluding salary during the last five years

Response: 23.92

# 4.1.2.1 Expenditure for infrastructure development and augmentation, excluding salary year wise during last five years (INR in lakhs)

2022-23	2021-22	2020-21	2019-20	2018-19
49.29	48.33	22.95	23.31	49.95

File Description	Document
Institutional data in the prescribed format	View Document
Audited income and expenditure statement of the institution to be signed by CA for and counter signed by the competent authority (relevant expenditure claimed for infrastructure augmentation should be clearly highlighted)	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

## 4.2 Library as a Learning Resource

4.2.1

Library is automated with digital facilities using Integrated Library Management System (ILMS), adequate subscriptions to e-resources and journals are made. The library is optimally used by the faculty and students

#### **Response:**

The institution has a library of 900 square meters with a total capacity of 150, which consist of two rooms that are Reading Hall, Digital Library etc. it provides efficient access to enable learning resources and automatic process like aided cataloguing, circulation, acquisition, resource management and reporting and analytics.

The library has a book collection of more than 27907 volumes of books in various departments like Mechanical, ECE, MBA, EEE, AI&DS, CSE. In addition to that library subscribes to 30 national and international Journals with 4 leading newspapers. It operates with Open Access System and provides services to UG and PG students and faculty members also.

The central library is fully automated in the year from 2018 with Auto-Lib Library Software Management.it is more Popular and advanced integrated library software also user friendly, cost effective and multi user automation software.

The library subscribes to more than 30 national and 30 international Journal, Delnet E-Journal, E-books ,and magazines.

The library enables bar code technology system for the circulation of books for both renewal and issues process. Where UG students can take 4 books PG students can take 5 books and for faculty upto 6 books from their ID cards for each semester. The renewable period is 15 days from the issuing date for both students and faculty.

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

#### 4.3 IT Infrastructure

#### 4.3.1

Institution frequently updates its IT facilities and provides sufficient bandwidth for internet connection

Describe IT facilities including Wi-Fi with date and nature of updation, available internet bandwidth within a maximum of 500 words

#### **Response:**

We have 305 computers in our college. Out of which, 267 computers provided for students purpose and 38 computers provided for administrative purposes. Internet service is available for both faculty and students. Our institution has Airtel 50 Mbps leased line and Wi-Fi facility in campus. The college provides internet facility to all faculty members irrespective of the departments to preserve and download materials for academic purposes as and when required. All faculty members are provided with their personal computers. Uninterrupted power supply is made available on the campus to access the internet without hindrance. Generators are provided in our college with a capacity of 100 KVA and 250 KVA for backup purpose. Wi-Fi connectivity is available in and around the campus with 50 mbps. Computer systems are upgraded with the latest software once every 3 years. Obsolete computers are duly replaced, and new ones are procured. The cost provisions are also made on a sufficiently broader scale for this in the annual budget. Also we have updated our service from all systems are duly monitored. Students are also taught to use them with utmost care and precaution. Our institution create rules for users to block sites and usage limits and generate customized reports. All the computers systems are protected with licensed k7 total security antivirus.

File Description	Document
Upload Additional information	<u>View Document</u>
Provide Link for Additional information	View Document

#### 4.3.2

Student – Computer ratio (Data for the latest completed academic year)

Response: 2.41

# 4.3.2.1 Number of computers available for students usage during the latest completed academic year:

Response: 267

File Description	Document
Purchased Bills/Copies highlighting the number of computers purchased	View Document
Extracts stock register/ highlighting the computers issued to respective departments for student's usage.	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

# 4.4 Maintenance of Campus Infrastructure

4.4.1

Percentage expenditure incurred on maintenance of physical facilities and academic support facilities excluding salary component, during the last five years (INR in Lakhs)

**Response:** 51.21

# 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)

2022-23	2021-22	2020-21	2019-20	2018-19
131.14	67.97	35.74	88.71	91.39

File Description	Document
Institutional data in the prescribed format	<u>View Document</u>
Audited income and expenditure statement of the institution to be signed by CA for and counter signed by the competent authority (relevant expenditure claimed for maintenance of infrastructure should be clearly highlighted)	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

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

## **5.1 Student Support**

#### 5.1.1

Percentage of students benefited by scholarships and freeships provided by the institution, government and non-government bodies, industries, individuals, philanthropists during the last five years

**Response:** 80.94

# 5.1.1.1 Number of students benefited by scholarships and freeships provided by the institution, Government and non-government bodies, industries, individuals, philanthropists during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
569	439	444	540	717

File Description	Document
Year-wise list of beneficiary students in each scheme duly signed by the competent authority.	View Document
Upload Sanction letter of scholarship and free ships (along with English translated version if it is in regional language).	View Document
Upload policy document of the HEI for award of scholarship and freeships.	View Document
Institutional data in the prescribed format	View Document

#### 5.1.2

Following capacity development and skills enhancement activities are organised for improving students' capability

- 1. Soft skills
- 2. Language and communication skills
- 3. Life skills (Yoga, physical fitness, health and hygiene)
- 4.ICT/computing skills

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

File Description	Document
Report with photographs on Programmes /activities conducted to enhance soft skills, Language and communication skills, and Life skills (Yoga, physical fitness, health and hygiene, self-employment and entrepreneurial skills)	View Document
Report with photographs on ICT/computing skills enhancement programs	View Document
Institutional data in the prescribed format	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

#### 5.1.3

Percentage of students benefitted by guidance for competitive examinations and career counseling offered by the Institution during the last five years

Response: 95.01

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

2022-23	2021-22	2020-21	2019-20	2018-19
625	499	509	626	921

File Description	Document
Upload supporting document	View Document
Institutional data in the prescribed format	View Document

#### 5.1.4

The institution adopts the following for 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

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

File Description	Document
Proof related to Mechanisms for submission of online/offline students' grievances	View Document
Proof for Implementation of guidelines of statutory/regulatory bodies	View Document
Details of statutory/regulatory Committees (to be notified in institutional website also)	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

## **5.2 Student Progression**

#### 5.2.1

 $\label{lem:progressing} \ \ \textbf{Percentage of placement of outgoing students and students progressing to higher education during the last five years$ 

**Response:** 80.79

# 5.2.1.1 Number of outgoing students placed and / or progressed to higher education year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
82	84	144	235	313

#### 5.2.1.2 Number of outgoing students year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
101	90	198	314	359

File Description	Document
Number and List of students placed along with placement details such as name of the company, compensation, etc and links to Placement order(the above list should be available on institutional website)	View Document
List of students progressing for Higher Education, with details of program and institution that they are/have enrolled along with links to proof of continuation in higher education.(the above list should be available on institutional website)	View Document
Institutional data in the prescribed format	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

#### 5.2.2

Percentage of students qualifying in state/national/international level examinations during the last five years

**Response:** 2.45

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

2022-23	2021-22	2020-21	2019-20	2018-19
1	0	0	1	3

File Description	Document
List of students qualified year wise under each category and links to Qualifying Certificates of the students taking the examination	View Document
Institutional data in the prescribed format	View Document

## 5.3 Student Participation and Activities

#### 5.3.1

Number of awards/medals for outstanding performance in sports/ cultural activities at University /

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state/ national / international level (award for a team event should be counted as one) during the last five years

Response: 39

# 5.3.1.1 Number of awards/medals for outstanding performance in sports/cultural activities at national/international level (award for a team event should be counted as one) year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
23	2	2	2	10

File Description	Document
Upload supporting document	<u>View Document</u>
list and links to e-copies of award letters and certificates	View Document
Institutional data in the prescribed format	View Document

#### 5.3.2

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

**Response:** 30.8

# 5.3.2.1 Number of sports and cultural programs in which students of the Institution participated year wise during last five years

2022-23	2021-22	2020-21	2019-20	2018-19
36	36	10	36	36

File Description	Document
Upload supporting document	<u>View Document</u>
Institutional data in the prescribed format	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:**

St. Joseph's College of Engineering and Technology Alumni Association was incorporated as a society under the Tamil Nadu Act 27 of 1975. The organization's development is significantly influenced by the association. The members of the executive board convene formally on a regular basis and keep meeting minutes. The alumni organization is fully committed to providing the university with academic and extracurricular support in a variety of ways. Since its founding, the association has used social media to stay in constant contact with every student who has graduated from this institution. Alumni opinions on the college's academic programs and facilities are periodically gathered for use in future upgrades.

The purpose of the alumni association is to:

- To establish a forum for alumni to connect and share experiences
- To supply Giving scholarships to worthy students
- To Contributing to the development of the college's academic program and facilities
- To Receiving sage counsel for the overall growth of the institution;
- Using alumni who have demonstrated excellence in their fields as guest lecturers and seminar leaders
- To Guiding and helping recently graduated alumni in finding jobs and pursuing worthwhile endeavors that benefit society
- To Organizing and coordinating alumni reunion events and allowing alumni to express gratitude to their alma mater
- To Gathering, publishing, and disseminating information that might be of use to the alumni and their alma mater
- To Reunion of Alumni Every year, an alumni reunion is planned to commemorate and relive past experiences alongside brand-new ones

Alumni Get Together is a platform is offered in order to graduates who are interested in interacting and sharing their experiences with others. The alumni give the school assistance in the following ways. Former Students as Visitors Alumni hold a number of esteemed positions, including those of adjunct professor, educator, police officer, advocate, software engineer, media platform, and entrepreneur. The departments welcome them as resource persons for their programs on soft skills and career advising. In order to inspire and raise awareness among students about their career development in a variety of sectors, alumni who are employed by companies are invited to discuss their experiences in their particular fields of competence. Additionally, the Alumni gifts Association takes gifts and uses funds for development. The fund is used to buy projectors, printers, and toners to improve the learning environments for the students. Academic writing is also supplied for the worthy pupils, and books are bought for the library. Additionally, alumni have given departmental bureaus and books as individual gifts. Former Students for Enrollment Alumni serve as the institution's brand ambassadors. They actively participate in attracting new students to the college and actively promote the establishment. Former Students Taking Part in Extension Activities When the clubs organize cleanliness campaigns and tree plantings in their communities, alumni also take part and lend support to these initiatives.

File Description	Document
Upload Additional information	<u>View Document</u>
Provide Link for Additional information	View Document

## Criterion 6 - Governance, Leadership and Management

#### 6.1 Institutional Vision and Leadership

#### 6.1.1

The institutional governance and leadership are in accordance with the vision and mission of the Institution and it is visible in various institutional practices such as NEP implementation, sustained institutional growth, decentralization, participation in the institutional governance and in their short term and long term Institutional Perspective Plan.

#### **Response:**

The Institution aims to impart quality education combined with ethical values, the qualities that are in resemblance with the nation's development.

#### Vision:

• To be an institute of Excellence in Engineering & Management through value based education and multidisciplinary research for the positive transformation of the society.

#### **Mission:**

- To inculcate technical knowledge and soft skills among the students through student-centric learning process
- To empower the students to develop as ethically outstanding professionals capable of creating global engineering enterprises.
- To create a collaborative research environment that focuses on socio-economic needs.

The mission statement spells out the needs of the society in crystal clear terms such as technically competent and holistic development of the individual to accomplish the vision of the institution. To achieve these objectives, the teaching-learning process involves effectively imparting competitive technology with research orientation to the students through various courses classified as Basic Sciences & Humanities, Engineering sciences, Professional core, Professional electives, Open Electives, Skill development courses and project work Courses related to Human Values and Professional Ethics are offered to the students as part of curriculum. The students are provided with skills to meet the competitive technologies through skill development programs. The board of governance has been constituted as per the norms, oversee the operations of the institute and provide guidelines for proper functioning of the institute. The Board of Governance meet at regular intervals and review the operations of the institution and provide guidance for further improvements.

#### **Perspective Plans:**

The Principal of the Institute discusses the broad components of the Perspective Plan with the Managing Committee of the Institution and it is then finalized in consultation with the Governing body St. Joseph's College of Engineering and Technology. The Strategic Plan for the institute was developed the duration 2024-2028. Based on the achievements till 2023, further plans were prepared up to 2028.

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#### Participation of the teachers in the decision-making bodies:

Faculty are represented in all decision making bodies of the institute namely, Academic Council, IQAC etc. While two senior faculties have been nominated as members of Governing Council, two professors and one Associate Professor have been nominated as members of the council. While all the HODs and some of the faculties are members of the IQAC. Most of the faculty are also members of various other Committees viz., Anti Ragging, Grievances Redressal, Internal Complaint committee, SC/ST Welfare cell etc., which have been constituted with specific functions and responsibilities.

While the minutes of the meetings of the IQAC are posted on the Institute Website, the minutes of the meetings of other Committees are recorded and circulated to the concerned. Faculty are also the members of Course Committee and Department Advisory Committee.

File Description	Document
Upload Additional information	<u>View Document</u>
Provide Link for Additional information	View Document

### **6.2 Strategy Development and Deployment**

#### 6.2.1

The institutional perspective plan is effectively deployed and functioning of the institutional bodies is effective and efficient as visible from policies, administrative setup, appointment, service rules, and procedures, etc

#### **Response:**

St. Joseph's College of Engineering and Technology Established in the year 2007 offer both UG and PG programs. SJCET has a governing council constituted as per AICTE provisions. It consists of chairman, nominees of management, members representing academia, Industry, faculty and Principal of the institution. Academic council oversees policies and procedures regarding academic matters with principal, HODs and senior faculties of the college experts from premier institution, industries representative and University nominee as members. The college Academic committee meets regularly for monitoring and implementation of policies, Academic and Admissions, Placement and training. Also there are functional heads for Finance, Administration, learning resource centre, computer centre, Physical education and maintenance also report to the principal. Other 15 committees include Antiragging, Cultural Committee, Institution interaction cell, Women empowerment cell etc.

Administrative manual includes employee's duties, responsibilities, leave and conduct rules, recruitment process etc. A provision is available for stake holders to give their feedback/suggestions through online and in suggestion boxes.

The institutional strategic /perspective plan has been clearly articulated and implemented.

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The following goals of the strategic plans 2024-2028 are being implemented.

- To establish better academic practices and procedures
- To produce technically competent and ethically strong
- To encourage research and consultancy
- To develop a smart and green campus
- To encourage more industry interactions
- To develop strong alumni interaction

The tasks involved are, increasing the campus survilenace system, enhancement of energy conservation systems. Wi-Fi access points have been provided in the campus to strengthen the teaching learning process.

The strategic planning document developed served as a monitoring tool for self appraisal at various levels and also be a guiding document from Management to Staff level. Periodical reviews to assess the achievement level and taking necessary corrective action were called for. With sustained efforts, involvement, monitoring and support, the goals set in the document were achieved.

#### **Institutional bodies**

Various institutional bodies for efficient and effective functioning of the institutes are

S.No	Name of the Committees	
1	Academic Council Committee	
2	Anti-Ragging Committee	
3	Anti –Ragging Squad Committee	
4	Industry Institute Interaction committee	
5	Research and development committee	
6	Alumni Association Cell	
7	Cultural Committee	
8	Discipline and welfare committee	
9	Grievances and Redressal Committee	
10	Women Empowerment Cell	
11	Examination Committee	
12	Hostel Welfare Committee	
13	Internal Quality Assurance Cell	
14	Library Advisory Committee	
15	National Service Scheme Committee	
16	Placement Training Cell	
17	Sports Committee	
18	SC/ST Welfare Committee	
19	OBC Cell	
20	Minority Cell	
21	Internal Complaint Committee	
22	Entrepreneurship Development Cell	

The establishment above institutional bodies are to accomplish better academic practices and procedures.

File Description	Document
Upload Additional information	<u>View Document</u>
Institutional perspective Plan and deployment documents on the website	View Document
Provide Link for Additional information	View Document

#### 6.2.2

#### Institution implements e-governance in its operations

- 1. Administration
- 2. Finance and Accounts
- 3. Student Admission and Support
- 4. Examination

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

File Description	Document
Screen shots of user interfaces of each module reflecting the name of the HEI	View Document
Institutional expenditure statements for the budget heads of e-governance implementation ERP Document	View Document
Annual e-governance report approved by the Governing Council/ Board of Management/ Syndicate Policy document on e-governance	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

## **6.3 Faculty Empowerment Strategies**

#### 6.3.1

The institution has performance appraisal system, effective welfare measures for teaching and non-teaching staff and avenues for career development/progression

#### **Response:**

St. Joseph's College of Engineering and Technology takes care of its teaching staff as well as other faculty in the campus. The institution guarantees that its staff members will contribute to the growth and development of the learning environment as well as their own academic progress.

#### **Professional growth:**

- Staff members who wish to attend workshops, seminars, and conferences can receive financial assistance to cover registration fees, conference attendance, and travel expenses.
- Rewards for Research Projects and Publications
- To help fellow faculty members with their research and knowledge acquisition, faculty members may provide visiting professorships at other institutions.
- To further their professional development as well as institutional research and development, faculty members are encouraged to acquire doctorates.

#### Welfare measures:

Casual leave/sick leave for both teachers and other staff. Maternity leave for employees who are women. Administrative support for teachers and other staff members' Provident Fund contributions

#### **System of Performance Appraisal:**

The following criteria will be used to evaluate teaching staff performance during the semester: Information about their teaching quality, course delivery, etc. is collected as follows.

- Numerous components of assessment analysis include HoD feedback on staff performance in areas such as assignment completion, group work, subject input, punctuation and dress code, and classroom management.
- Assessments for non-teaching personnel will focus on LOP, teamwork, punctuality, subject input, and laboratory maintenance.

#### **Feedback Evaluation:**

Each year, students evaluate their instructors, examining many facets of the student-teacher dynamic within an automated, structured framework. This assessment examines the following aspects of the educational process: regularity, timeliness, instructor discussion, exams, tutorials, assignments, syllabus, college environment, resources, and management response. It also examines the transportation, games, sports, canteen water supply, library resources, primary grievance resolution, and management's general support. Complete privacy and secrecy are maintained throughout the evaluation procedure to safeguard the student assessor's identity. An advisory board consisting of professors and the Head shall provide advice, recommendations, and improvement training to any faculty members deemed to be deficient.

#### **Student's End Semester Feedback:**

Students are instructed to submit the feedback link in Google form on following basis: Coverage of syllabus, ability to explain the concepts in clear and simple language, creating interest through examples, audibility while giving the lecture, voice modulation and mannerisms, interaction in the class, overall class control, discipline and punctuality.

#### **Effectiveness and follow-up action:**

If any faculty member is found to be deficient, he/she is counseled, advised and trained to improve through an advisory committee consisting of Professors and Head concerned.

File Description	Document
Upload Additional information	<u>View Document</u>
Provide Link for Additional information	View Document

#### 6.3.2

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

Response: 60.2

# 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

2022-23	2021-22	2020-21	2019-20	2018-19
50	64	73	81	39

File Description	Document
Policy document on providing financial support to teachers	<u>View Document</u>
Institutional data in the prescribed format	<u>View Document</u>
Copy of letter/s indicating financial assistance to teachers and list of teachers receiving financial support year-wise under each head.	View Document
Audited statement of account highlighting the financial support to teachers to attend conferences / workshop s and towards membership fee for professional bodies	View Document

#### 6.3.3

Percentage of teaching and non-teaching staff participating in Faculty development Programmes (FDP), Management Development Programmes (MDPs) professional development /administrative training programs during the last five years

Response: 72.62

6.3.3.1 Total number of teaching and non-teaching staff participating in Faculty development Programmes (FDP), *Management Development Programmes (MDPs)* professional development /administrative training programs during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
86	83	104	94	84

#### 6.3.3.2 Number of non-teaching staff year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
21	20	22	26	22

File Description	Document
Institutional data in the prescribed format	View Document
Copy of the certificates of the program attended by teachers.	View Document
Annual reports highlighting the programmes undertaken by the teachers	View Document

## **6.4 Financial Management and Resource Mobilization**

#### 6.4.1

Institution has strategies for mobilization and optimal utilization of resources and funds from various sources (government/ nongovernment organizations) and it conducts financial audits regularly (internal and external)

#### **Response:**

The College aims to impart quality education combined with ethical values, the qualities that are in resemblance with the nation's development. The vision of the college is

To be an institute of Excellence in Engineering and Management through value based education and multidisciplinary research for the positive transformation of rural society. The educational and charitable trust DFT, which governs the institute, has a successful approach for raising money to support its operations while maintaining its strict adherence to quality standards and attaining its goals and objectives.

The majority of the revenue comes from student fees. The institution uses the money it receives from student fees for a variety of academic development initiatives. The money received from hostel residents goes toward running and maintaining the hostel.

#### **Financial Management**

The management made the following policy decisions as providing scholarships to deserving students who come from rural backgrounds and economically weaker sections

Faculty members are eligible to submit proposals for conducting workshops, seminars, FDPs,

conferences and research projects to AICTE, TNSCST, CSIR,MSME, UGC and DST for obtaining funds to enhance the quality of teaching, learning and research. The funds are used for purchase of advanced equipment and conduct research in the specific areas proposed.

The College is also receiving scholarships from the State and Central Govt to distribute to the needy.

Institute has been planning towards efficient use of budgeted fund for each academic year. The fund is optimally utilised for the Students, Staff, laboratory, infrastructure, Library, etc.

#### **Budget**

The Head of the Institution prepares the budget allocation proposal, taking into account the recommendations from department heads, and submits it to the management. The accounts department will then examine the allocated budget to ensure expenses align with the approved budget. The budget includes recurring expenses such as maintenance, electricity, internet charges, salary, and stationery, as well as non-recurring expenses like furniture, lab equipment purchases, and other development expenses.

#### **Process of internal auditing**

The internal auditing committee regularly reviews all invoices and vouchers, ensuring accurate expense records are maintained by the accounts department, as the institution prioritizes the importance of precise accounts; furthermore, a legal audit is conducted at the end of the fiscal year, with the resulting report being examined by management to ensure accountability. At the beginning of each financial year, the accounts department plans the efficient use of financial resources, handling tasks such as processing purchase orders for laboratory equipment, instructional aides, furnishings, and facilities, as well as managing maintenance bill payments, tuition fee collection, wage distribution, tax payment, and loan distribution.

#### **Process of external auditing**

According to government regulations, external auditing is typically conducted on a yearly basis. Once the auditor confirms it, all transactions are duly authorized and presented to management for further examination. Any discrepancies identified during the audit process will be promptly investigated along with the necessary supporting documents within the specified time frames. The audited declaration on the paperwork is duly acknowledged by the authorities in management.

File Description	Document	
Upload Additional information	View Document	
Provide Link for 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. It reviews teaching learning process, structures & methodologies of operations and learning outcomes at periodic intervals and records the incremental improvement in various activities

#### **Response:**

The Internal Quality Assurance Cell was established in 2021 with the goal of ensuring internal quality in all aspects of the institute's procedures, including academics, finance, administration, and other relevant fields. IQAC ensures the quality processes and reviews the teaching-learning process on a regular basis.

#### Roles and Responsibilities of IQAC

- Development and application of quality benchmarks/parameters for various academic and administrative activities of the institution;
- Facilitating the creation of a learner-centric environment conducive to quality education and faculty maturation to adopt the required knowledge and technology for participatory teaching and learning process
- Monitoring and evaluating the teaching learning process and Research activities in the organization to enhance the outcome of the organization
- Arrangement for feedback response from students, parents and other stakeholders on qualityrelated institutional processes
- Dissemination of information on various quality parameters of higher education
- Organization of inter and intra institutional workshops, seminars on quality related themes and promotion of quality circles
- Documentation of the various programmes/activities leading to quality improvement and hence auditing the documentation
- Acting as a nodal agency of the Institution for coordinating quality-related activities, including adoption and dissemination of best practices
- Development and maintenance of institutional database through MIS for the purpose of maintaining /enhancing the institutional quality
- Development of Quality Culture in the institution
- Preparation of the Annual Quality Assurance Report (AQAR) as per guidelines and parameters of NAAC, to be submitted to NAAC

The IQAC ensures the teaching-learning process and its outcomes through the following methods.

• Periodic IQAC meeting

- Class Committee meeting, Course Committee Meetings
- Semester-end feedback
- Student exit survey

#### Quality assurance strategies and processes

#### **Mechanism of Feedback**

- To guarantee that the teaching-learning and assessment procedures are carried out correctly, an efficient feedback system is developed. The hierarchy, including the head of the department, principal, and class adviser, keep an eye on the teaching-learning process.
- One of the best methods for improving quality is providing feedback. It constantly provides us with the chance to learn how other people see us. Every semester, our university holds a structured feedback session in which input is gathered from faculty, employers, parents, students, and alumni, among other internal and external stakeholders.
- The departments will review the feedback and take appropriate action.

#### **Collaborative activities**

A good way to close the gap between education and career chances is through industry collaboration. This is the clearly established relationship that leads to better student outcomes and advantages. In order to keep up with the expectations of the younger generation of budding engineers, knowledge creation and technological development require extensive training. These contributions take the form of Memorandums of Understanding (MoUs) that are signed by key industry and academic institutions to provide students training programs and internships in respective fields.

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

#### 6.5.2

#### Quality assurance initiatives of the institution include:

- 1. Regular meeting of Internal Quality Assurance Cell (IQAC); quality improvement initiatives identified and implemented
- 2. Academic and Administrative Audit (AAA) and follow-up action taken
- **3.** Collaborative quality initiatives with other institution(s)
- 4. Participation in NIRF and other recognized rankings
- 5. Any other quality audit/accreditation recognized by state, national or international agencies such as NAAC, NBA etc.

**Response:** A. Any 4 or more of the above

File Description	Document
Quality audit reports/certificate as applicable and valid for the assessment period.	View Document
NIRF report, AAA report and details on follow up actions	View Document
List of Collaborative quality initiatives with other institution(s) along with brochures and geo-tagged photos with caption and date.	View Document
Link to Minute of IQAC meetings, hosted on HEI website	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

## **Criterion 7 - Institutional Values and Best Practices**

### 7.1 Institutional Values and Social Responsibilities

#### 7.1.1

Institution has initiated the Gender Audit and measures for the promotion of gender equity during the last five years.

Describe the gender equity & sensitization in curricular and co-curricular activities, facilities for women on campus etc., within 500 words

#### **Response:**

#### **Gender Equality**

An essential element of society's overall development is gender equality as a result, it's critical to raise student knowledge of gender equality from the beginning of their academic careers. Colleges and schools can be very important in this due to the fact that adolescents spend almost all of their time with their peers, both male and female. Gender audits must be carried out using various scientific techniques in order to raise awareness, evaluate the level of gender equality in higher education institutions, and identify possible ways to reduce gender discrimination.

St.Joseph's College of Engineering and Technology is devoted to providing high-quality education and has never compromised on creating a student-centered the environment. Under the direction of the college faculty, student involvement in extracurricular activities such as NCC, NSS, sports, and culture is encouraged. The college always takes into account the complete development of each student's personality as well as their qualitative performances. With 50 seats, the college's NCC unit for girls focuses on developing qualities like leadership, discipline, a willingness to take risks, camaraderie, an adventurous spirit, a secular perspective, and a sense of patriotism. The college's NSS team is always prepared to inspire students to take on social obligations. Even if the institution provides all of these resources for students' general growth, it's still critical to learn.

#### **Objectives of the Gender Audit**

- 1. To learn about the college's present level of gender equality.
- 2. To determine which components of the college are affected by gender inequality.
- 3. To recommend suitable actions to reduce the gender gap.

#### Curricular and Co-curricular activities

Indian culture was established by developing a strong foundation of tolerance, which is a fundamental human feature. It is generally accepted when college programs clarify the significance of various events and functions, students understand and internalize their essence. In our college, commemorating occasions and holidays becomes an essential component of education and creating a strong belief in heritage. Through these celebrations, the children get to know one another's cultures and traditions better

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and grow to value and understand them. There are three different kinds of celebrations: religious, national, and seasonal.

The following are the objectives of celebrating these festivals: National holidays will strengthen student relationships and develop an ethic of nationalism, contributing in growing them into better citizens. Attending a seasonal event alters students' perspectives on everyone's sensibility and perceptions. An inclusive environment with tolerance and harmony toward cultural, regional, linguistic, communal, socioeconomic, and other diversity can be obtained by St. Joseph's College of Engineering and Technology to all students. As a result, our college organizes various festivals and events during the year. Few celebrations are:

- Ayudha Pooja Celebration
- Christmas Celebration
- Pongal Celebration
- International Women's Day
- Cultural and Sports day celebrations

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

#### 7.1.2

#### The Institution has facilities and initiatives for

- 1. Alternate sources of energy and energy conservation measures
- 2. Management of the various types of degradable and nondegradable waste
- 3. Water conservation
- 4. Green campus initiatives
- 5. Disabled-friendly, barrier free environment

**Response:** A. 4 or All of the above

File Description	Document	
Policy document on the green campus/plastic free campus.	View Document	
Geo-tagged photographs/videos of the facilities.	<u>View Document</u>	
Circulars and report of activities for the implementation of the initiatives document	View Document	
Bills for the purchase of equipment's for the facilities created under this metric	<u>View Document</u>	
Provide Links for any other relevant document to support the claim (if any)	View Document	

#### 7.1.3

Quality audits on environment and energy regularly undertaken by the Institution. The institutional environment and energy initiatives are confirmed through the following

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

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

File Description	Document	
Report on Environmental Promotional activities conducted beyond the campus with geo tagged photographs with caption and date	View Document	
Policy document on environment and energy usage Certificate from the auditing agency	View Document	
Green audit/environmental audit report from recognized bodies	<u>View Document</u>	
Certificates of the awards received from recognized agency (if any).	View Document	
Provide Links for any other relevant document to support the claim (if any)	View Document	

#### 7.1.4

Describe the Institutional efforts/initiatives in providing an inclusive environment i.e., tolerance and harmony towards cultural, regional, linguistic, communal socioeconomic and Sensitization of

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# students and employees to the constitutional obligations: values, rights, duties and responsibilities of citizens (Within 500 words)

#### **Response:**

India is grateful to be home to people who possess kind souls that deserve to be the perfect representation of flexibility and tolerance. India is home to a variety of cultures that interact in one home without discrimination, learning the universe how to cooperate and value the lives of other living things as well as other people. It is a well-known fact that students acquire and process the essence of many events and functions after college programs clarify their relevance. In our college, commemorating occasions and holidays becomes an essential component of education and creating a strong foundation for cultural identity. These celebrations develop friendship and respect among the kids as well as stronger relationships based on similarities in traditions and cultural beliefs.

- National holidays will improve ties in the students and create an awareness of nationalism in them, contributing to their development into better adults. Observing a seasonal festivity alters how students think about the worth and sensitivity of all people, regardless of differences.
- Religious holidays teach students about ethics and values that must be respected for everyone to live in happiness.
- International festivals will instruct students about the importance of brotherhood among people of different cultures and places, which will ensure that there will be no wars, fighting, or conflicts in the entire world. St. Joseph's College of Engineering and Technology provides a supportive environment for everyone with tolerance and cooperation toward cultural, regional, linguistic, communal socioeconomic, and other diversities to accomplish the objectives mentioned earlier.
- A variety of cultural and sports activities held within the campus foster goodwill among students. People from many various cultures live in India, an ethnically diverse nation. As a result, our college organizes several festivals and events throughout the year. The few festivities are:
- Celebration of Gandhi Jayanthi: This day is celebrated nationally as the "International Day of Nonviolence". The primary goal of this day's celebration is to motivate everyone to be humble and simple to handle, encouraging them to live in peace with one another through the discipline of nonviolence. Many leaders have worked to transform the world into a paradise on earth by honoring Gandhi's principles.
- "Matribhasha Diwas" International Mother Language Day, or "Matribhasha Diwas," is celebrated year to encourage the use of mother tongues and to raise public awareness of linguistic and cultural customs.
- Pongal Celebration: Since India is an agricultural nation, much of its celebrations concentrate surrounding the world of agriculture. One of India's largest harvest celebrations, Pongal is observed by the people of Tamil Nadu. Given that the objective of the celebration is to express thanks to the Sun God, it could be recognized as the "thanksgiving" holiday.

File Description	Document	
Upload Additional information	<u>View Document</u>	
Provide Link for Additional 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:** 

#### **BEST PRACTICES-I**

#### 1.TITLE OF THE PRACTICE:

Empowering through scholarships involves providing financial support to deserving individuals, enabling them to pursue their educational goals without financial burden.

#### 2. OBJECTIVE OF THE PRACTICE:

The objectives of practicing scholarship meaning the application and pursuit of scholarly activities and funding can be broadly categorized into several key areas.

- Enhancing Educational Access
- Encouraging Academic Excellence
- Promoting Equity and Diversity
- Supporting Research and Innovation
- Encouraging Lifelong Learning

In practice, the objectives of scholarships are multifaceted and aim to create positive outcomes for individuals, institutions, and society as a whole. These objectives guide the design, implementation, and evaluation of scholarship programs to ensure they achieve their intended goals effectively.

#### 3. THE CONTEXT:

In rural India, much like elsewhere, some students at our college hail from backgrounds where higher education remains not just a luxury but also financially out of reach. Although government support for reserved categories and minorities has become active, benefiting many students through scholarships, we believe such governmental aid, while crucial, is insufficient. Addressing multidimensional poverty obstructing access to higher education requires more than these initiatives alone.

Recognizing that some students do not qualify for government support yet face financial hardship, our college has taken steps to identify and assist them using its own funds, including partial or full tuition fee waivers. Through this program, we aim to foster a democratic and welcoming environment where teachers and students can freely exchange ideas on issues impacting their daily lives. Top of Form

#### 4. THE PRACTICE:

Our college has actively supported students from humble backgrounds. It has made a strong commitment to provide comprehensive financial assistance to deserving and needy students, enabling them to pursue higher education, regardless of their financial constraints. It aims to offer financial aid not only to

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economically disadvantaged students but also to those who excel in academic, co-curricular, extracurricular, extension, and sports activities. In line with its goal of fostering student character and personality, the college has established various associations that organize extra-curricular activities aligned with academic values. To support deserving and needy students, the management, through the DMI Foundation, extends financial assistance without any discrimination based on caste, creed, or gender.

#### 5. EVIDENCE OF SUCCESS:

### **Benefits for Recipients:**

- **Financial Relief**: Scholarships alleviate the financial burden on students, allowing them to focus more on their studies and extracurricular activities without the stress of significant student debt.
- **Increased Access**: They make higher education more accessible to students from diverse economic backgrounds, ensuring that talented individuals can pursue engineering careers regardless of their financial situation.
- Career Advancement: Students who receive scholarships may have better access to resources such as internships, research opportunities, and networking events, which can enhance their career prospects.
- **Reduced Dropout Rates**: Financial aid through scholarships can reduce dropout rates by easing the economic strain on students, allowing them to complete their degrees.

#### **Institutional Benefits:**

- **Diversity and Inclusion**: Scholarships can help increase diversity within the student body, bringing in a range of perspectives and experiences that enrich the educational environment.
- Improved Graduation Rates: By providing financial support, institutions can improve their overall graduation rates and student success metrics.
- Enhanced Research and Innovation: Scholarships can enable students to engage more deeply in research and innovation, potentially leading to breakthroughs and advancements in various engineering fields.
- **Strengthened Alumni Networks**: Graduates who have benefitted from scholarships whether through donations, mentorship, or networking, strengthening the institution's community and resources.

#### **BEST PRACTICES-II**

#### 1. TITLE OF THE PRACTICE:

Promoting Institutional values and social responsibilities among students and public through NSS, YRC and RRC.

#### 2. OBJECTIVE OF THE PRACTICE:

The primary objectives of the NSS, YRC and RRC are:

- To understand their own roles and relationships within the community.
- To identify the community's needs and problems and engage in problem-solving.

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- To cultivate a sense of social and civic responsibility.
- To apply their knowledge to develop practical solutions for individual and community issues.

#### 3. THE CONTEXT:

The NSS, YRC and RRC Unit of the College, under the dynamic leadership of the NSS Programme Officer, is actively involved in a range of activities throughout the academic year. The unit commenced its work at the start of the session with strong backing from NSS volunteers, guided by the Programme Officer. We observed a significant interest among students to engage in social activities, which helps them become socially aware and resourceful during their college years.

#### 4. THE PRACTICE:

NSS, YRC and RRC Volunteers actively engage in the Swatch Bharat Mission, taking the lead in keeping the campus clean. The volunteers also engaged with local residents to promote cleanliness and hygiene in the surrounding areas. Additionally, they conducted a rally in the nearby locality, carrying placards with slogans to raise awareness about health and sanitation. Furthermore, NSS volunteers contributed to environmental conservation by planting saplings on the campus, aiming to foster a green ecosystem in the region. It is crucial to awaken the social conscience of students and provide them with opportunities to work directly with people in villages and slums. This interaction is intended to expose them to real-life challenges and shift their social perspectives.

#### **5. EVIDENCE OF SUCCESS:**

Our SJCET students who took part in the activities seemed more aware of their surroundings and are now motivated to engage in additional social initiatives, such as blood donation drives, medical camps organized by our college. Successful execution of community service projects such as health camps, blood donation drives, and environmental initiatives, resulting in tangible benefits for the community. A noticeable rise in student and community participation in NSS, YRC, and RRC activities, reflecting heightened awareness and engagement. Improvement in students' organizational, leadership, and interpersonal skills as evidenced by their effective coordination of events and successful collaboration with local authorities. Positive feedback from community members and stakeholders regarding the effectiveness and impact of the services and initiatives provided. The success of awareness and educational campaigns, measured by increased public knowledge and changes in behavior related to health, safety, and social responsibility.

File Description	Document	
Any other relevant information	<u>View Document</u>	
Best practices as hosted on the Institutional website	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:**

#### GREEN INITIATIVES AND ENVIRONMENT FRIENDLY CAMPUS:

A college green campus that places a high priority on sustainability and environmental consciousness in its operations, policies, and practices is commonly referred to as a "green campus". These are some salient features that are usually connected to a green campus. We place equal emphasis on societal reforms and academic accomplishment in order to develop successful, well-educated people. Addressing the growing ecological issues requires immediate action, with an emphasis on putting eco-friendly policies into place. Sustainable practices are given top priority by the college in its attempts to conserve the environment.

#### TREE PLANTATION:

The protection of the environment is very important to our organization. We regularly start tree-planting initiatives on our campus and in the neighborhood. The College regularly hosts poster contests with an environmental theme and tree planting events to increase public awareness of nature and natural resources. These initiatives are frequently carried out in coordination with other college committees, cells, and departments. Students and staff, both teaching and non-teaching, actively participate in these tree planting campaigns.

#### **ESTABLISHMENT OF ECO-FRIENDLY CAMPUS:**

For every organization that cares about preserving the environment, an eco-friendly setting is essential. Adopting the "go green" philosophy is the best way to protect the environment. Environmentally friendly items are made with minimal negative effects on the environment in mind, and they drastically reduce pollution of the air, water, and land. Additionally, they are less expensive and have a smaller negative impact on the environment and pollutants. The environment is seriously threatened by activities like pollution, urbanization, deforestation, and global warming. These problems are made worse by air pollution, which is brought on by gases and suspended particles. At SJCET Campus, we value and assume accountability for putting green ideas into practice by educating stakeholders, teachers, and students about the value of upholding a green campus. The college carefully handles garbage from several sources, such as electronic, material, and water waste. This strategy reduces the use of paper and encourages the use of solar-passive buildings and other eco-friendly activities that preserve natural resources. Our college constantly keeps an eye on things like power, water, and hygiene and works to become self-sufficient in those areas. In order to do this, we have developed a green policy that emphasizes improving green landscape and creating.

#### **GREEN POLICY:**

Our college's Green Campus, Energy, and Environment Policies aim to foster extracurricular activities that inspire students to contribute to the development of an environmentally sustainable campus. These efforts will result in enhancements to both infrastructure and administrative operations, ultimately improving energy efficiency and environmental sustainability.

#### **ORGANIC FARM:**

- "Organic farm" generally means farms or structures derived from or similar to living organisms or natural objects. Organic Farms are there in SJCET .It can have different meanings in different contexts:
- **1. Art and design:** In art and design, organic spaces often refer to shapes or compositions that imitate irregular shapes found in nature, such as leaves, shells or flowing water. They differ from geometric spaces, which are more regular and precise.
- **2. Architecture:** Organic architecture refers to an architectural philosophy that promotes harmony between man and nature. Buildings designed in this style often use natural materials and organic forms that blend into their surroundings.
- **3. Biology:** In biology, organic properties refer to the shapes and structures of living organisms, such as the branching patterns of trees, the spiral shape of shells or the cellular structure of tissues.
- **4. Philosophy and Aesthetics:** In philosophy and aesthetics, organic space can also refer to a principle of organization or composition that suggests growth, harmony and unity, such as natural processes. In general, "organic space" incorporates a concept that embraces the irregular, fluid and interconnected aspects of nature, often in conflict with the strict regularity of geometric spaces.

#### **HERBAL FARM:**

"Herbal" usually refers to products or drugs derived from plants or plant extracts. These may include herbal teas, supplements, tinctures or topical applications. Herbal farms are there in SJCET.

- **1. Medicinal uses:** Many herbs have medicinal properties that can be used to treat minor ailments or improve general health. For example, peppermint and chamomile are known for their calming effects, while garlic and echinacea support the immune system.
- **2.** Culinary use: Fresh herbs add flavor and nutritional value to food. Common herbs are basil, rosemary, thyme and coriander. Growing these herbs at home ensures a fresh food supply.
- **3. Aromatic Properties:** Herbs such as lavender, jasmine and lemongrass have pleasant scents that can be enjoyed in the garden or used in potpourri, sachets or homemade cosmetics
- **4. Natural Remedies:** Growing herbs supports the creation of home remedies such as teas, tinctures, salves and creams. It can be a cost-effective and sustainable way to treat minor health problems.
- **5. Environmental benefits:** growing herbs at home promotes biodiversity and can attract beneficial insects to your garden. It also reduces the need for chemical pesticides and herbicides.
- **6. Educational Opportunities:** Herbology offers hands-on learning experiences for people of all ages. It provides an overview of the life cycle of plants, herbal preparations and the cultural history of herbs.
- **7. Sustainability:** Growing herbs in your garden reduces dependence on store bought produce, which may be wrapped in plastic or have a large carbon footprint due to transportation.
- **8. Enhance outdoor spaces:** Herb gardens can enhance the beauty and functionality of outdoor spaces, whether in small pots on a balcony or as part of a larger garden landscape.

Overall, herb gardening offers many benefits, from promoting well-being and sustainability to enhancing

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culinary experiences and connecting people with nature and traditional knowledge.

#### **EVIDENCE OF SUCCESS:**

- Regular tree plantations have enriched the flora and fauna of the campus and made it an ecological environment.
- An information campaign promoting a plastic-free campus through strategically placed signs and display boards made the campus plastic-free.
- Students receive information on various environmental topics through workshops, seminars, participation in the National Service System (NSS) and nature club activities.

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

# 5. CONCLUSION

#### **Additional Information:**

- Ten Patents were granted in the Academic year 2023-2024.
- NPTEL local chapter established in 2024.
- SJCET Alumni Association was registered on July 2024.
- Induction Programmes and Bridge Courses are conducted for first and lateral entry students to bridge the gap between Institute and the I ndustry.
- Active IQAC is there in the college for verifying the quality of the faculty and stundents through the Internal and External Audits.
- Clean and Green Campus Awards received from the certification bodies for the Academic year 2022-2023.

# **Concluding Remarks:**

Education is not only an act of acquiring knowledge but learning skill to lead a life and forming one's personality. St. Joseph's College of Engineering and Technology continues the blazing glory in the field of education, deservedly bequeathing it from DFT Group of Intuitions. With a built up area of 15 Acres the college offers the perfect environment for the students to enhance their knowledge with latest technology. The College commits itself to promote self-disciplined holistic academic excellence among the most marginalized, oppressed and disadvantaged sections of the society so as to mould persons in pursuance of making a better human life through science and technology. Simultaneously this enhances the core strength of the students and enables them to make significant contribution to the development of the society in particular and the nation at large. All this contributes to the status and reputation of the College as the most chosen college by parents and students in this part of the state.

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## **6.ANNEXURE**

#### 1.Metrics Level Deviations

Metric ID Sub Questions and Answers before and after DVV Verification

1.2.1 Number of Certificate/Value added courses offered and online courses of MOOCs, SWAYAM, NPTEL etc. (where the students of the institution have enrolled and successfully completed during the last five years)

Answer before DVV Verification:

Answer After DVV Verification :65

Remark: DVV has made the changes basis the supporting shared by HEI.

- 1.2.2 Percentage of students enrolled in Certificate/ Value added courses and also completed online courses of MOOCs, SWAYAM, NPTEL etc. as against the total number of students during the last five years
  - 1.2.2.1. Number of students enrolled in Certificate/ Value added courses and also completed online courses of MOOCs, SWAYAM, NPTEL etc. as against the total number of students during the last five years

Answer before DVV Verification:

2022-23	2021-22	2020-21	2019-20	2018-19
639	488	481	663	995

#### Answer After DVV Verification:

2022-23	2021-22	2020-21	2019-20	2018-19
641	495	481	666	1008

Remark: DVV has made the changes basis the supporting shared by HEI

- 2.1.2 Percentage of seats filled against reserved categories (SC, ST, OBC etc.) as per applicable reservation policy for the first year admission during the last five years
  - 2.1.2.1. Number of actual students admitted from the reserved categories year wise during last five years (Exclusive of supernumerary seats)

Answer before DVV Verification:

2022-23	2021-22	2020-21	2019-20	2018-19
191	166	160	72	115

#### Answer After DVV Verification:

2022-23	2021-22	2020-21	2019-20	2018-19
187	166	160	72	115

2.1.2.2. Number of seats earmarked for reserved category as per GOI/ State Govt rule year

#### wise during the last five years

Answer before DVV Verification:

2022-23	2021-22	2020-21	2019-20	2018-19
227	206	247	290	431

Answer After DVV Verification:

2022-23	2021-22	2020-21	2019-20	2018-19
227	206	247	290	431

Remark: DVV has made changes as per the report shared by HEI.

- Number of books and chapters in edited volumes/books published and papers published in national/ international conference proceedings per teacher during last five years
  - 3.3.2.1. Total number of books and chapters in edited volumes/books published and papers in national/international conference proceedings year wise during last five years

Answer before DVV Verification:

2022-23	2021-22	2020-21	2019-20	2018-19
16	20	1	3	2

#### Answer After DVV Verification:

2022-23	2021-22	2020-21	2019-20	2018-19
3	8	1	1	2

Remark: DVV has made the changes basis the supporting shared by HEI

Number of functional MoUs/linkages with institutions/industries in India and abroad for internship, on-the-job training, project work, student / faculty exchange and collaborative research during the last five years.

Answer before DVV Verification : Answer After DVV Verification :29

Remark: DVV has made the changes basis the supporting shared by the HEI

#### 2.Extended Profile Deviations

Extended Profile Deviations
No Deviations