SELF STUDY REPORT

FOR

2nd CYCLE OF ACCREDITATION

T.J.S.ENGINEERING COLLEGE

T.J.S. ENGINEERING COLLEGE T.J.S NAGAR, PERUVOYAL, NEAR
KAVARAIPETTAI, GUMMIDIPOONDI TALUK, TIRUVALLUR DIST-601206
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BANGALORE

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1. EXECUTIVE SUMMARY

1.1 INTRODUCTION

T.J.S. Engineering College was pioneered by T.J. Sivananda Mudaliar Educational Trust in the year 2009 with a vision to make an indelible mark in the field of Engineering Education. It was established by the philanthropists with a passion to serve the young minds, a Quality Education, with a fine blend of traditional values. The College offers five undergraduate programme and three Postgraduate programme. with a total intake of 300 students in UG and 27 students in PG. The College is located in a sprawling campus (in 11.02 acres out of about 50 acres of trust land) at Peruvoyal, 3 km ahead of Kavaraipettai, 0.5 km west of NH5, 36 km from Koyambedu Bus Station, 4 km from Kavarapettai RS and 45 Km from Chennai Airport, this lush green serene area is most suitable to maximize the effectiveness of teaching and learning.

Academic Ambience at T.J.S.E.C

T.J.S.E.C is approved by AICTE, affiliated to Anna University and also achieved ISO 9001:2015 certificate for the Academic Standard. This self-financing Institution has been continuously expanding with well-developed and excellent infrastructure facilities. Every department has excellent and state of art standard laboratories (as per Anna University and AICTE norms), smart classrooms, spacious auditorium and conference hall. The excellent faculty members, with missionary zeal, not only guide the students in their academic interest but also channelize their thoughts and actions into positive direction.

The college imparts Engineering Education to young men and women of rural background, grooming their complete personality and enhancing them to face the challenges in the Global Market.

The institute has well developed infrastructure to ensure students to learn in a modern, high-quality, and updated places of learning that have incorporated technology interface wherever necessary. T.J.S.E.C teaches Intellectual and Practical Skills, including Inquiry and analysis, critical and creative thinking, written and oral communication, quantitative literacy, information literacy, teamwork and problem solving. It aims in instilling Personal and Social responsibility, including civic knowledge, intercultural knowledge and competence. T.J.S.E.C has taken great strides in Engineering Education and will continue to strive further and work towards achieving its Vision.

Vision

To empower the youth by developing their capabilities through quality education based on values.

Mission

To promote education through a holistic manner to make them employable. To make them responsible citizens to participate in the advancement of the society. To make them contribute to the national growth and the world at large. To promote excellence, quality and relevance in the field of technology to suit the industry needs.

1.2 Strength, Weakness, Opportunity and Challenges(SWOC)

Institutional Strength

- Sprawling Campus in a serene environment with excellent infrastructure.
- Freedom to adopt innovative methods in teaching and learning
- Self-motivated faculties
- Good retention index of faculty
- Teaching with hands on training and shifting to Students centric concepts
- Active mentoring system providing continuous guidance to the student and feedback to the parent.
- Guest Lectures by Experts from Industry & Institute of National repute for students & faculties.
- The training and development programmes are designed to improve confidence levels, analytical thoughts, presentation skills, communication skills and technical knowhow.
- Excellent campus placements
- MOU's with Leading organisations.
- No equity issues, ragging free environment
- Excellent facilities for sports
- Active participation in sports and other extra-curricular activities by both genders
- Integrated meditation course to every student.
- All round and abundant support from the Management for career Planning

Institutional Weakness

- Rural background do not attract people with high profile
- Students from rural background take time to come out of the complexities
- Flexibility in academic curriculum
- College situated far away from metropolitan city.
- Lack of funding from national organization for nurturing advanced research.

Institutional Opportunity

- Exploring more opportunities for consultancy projects.
- Participation of students in various competitions and Technical activities
- To start research centre to address current issues
- Mahendra city at just 1.5km from the college will provide job and consultancy works
- Many faculty pursuing research program will increase publication and scope for patents
- High retention index of the college will ensure consistency in the quality of education and foster technological sprits in the young minds
- To bring centre of excellence in the latest technologies like Block chain, IoT, Artificial Intelligence etc....
- To work with industries for upgrading automation by IoT
- Conduct international seminars on cutting edge technologies
- Setting skill development centre to nearby under privileged village for youngsters
- Taking the college to new standards by getting NBA.
- Improving the placement and consultancy work through Alumni's

- Starting more PG programs in the latest thrust areas
- Creating incubation centre to the rural people enabling them to bring their dream true
- Providing working platform to IT companies to expose the talents of the final year students(internship, part time job at the college itself by the MNCs)
- Preparing students for GATE, GRE and Govt. / Public Sector competitive Exam.

- Potential placement opportunities in Core industries.
- To create right ambience for Students to participation in MOOCs
- To conduct faculty development program on essential thrust areas in Engineering and Life skills

Institutional Challenge

- Less inclination of student in rural area towards pursuing higher technical education.
- Getting research fund from reputed organisations
- Initiating consultancy services from the industries
- Creating Entrepreneurs.

1.3 CRITERIA WISE SUMMARY

Curricular Aspects

T.J.S Engineering College is affiliated to Anna University, Chennai and adopts the curriculum designed and prescribed by Anna University. Faculty and students are well informed about the curriculum at the beginning of every semester.

T.J.S Engineering College prepares an action plan for effective implementation of the syllabus prescribed by the University. The Principal conducts meetings with HODs and develops strategies for implementing the curriculum. As per the requirements of Outcome-Based Education, Course Outcomes (CO's), Programme Educational Objectives (PEO's)and Programme Outcomes (PO's) are defined in line with the Vision and mission of the college. Course files are prepared by the faculty with details of the teaching plan, teaching methodologies, notes, materials, question bank etc.

Students are provided with Choice Based Credit System (CBCS) for excellent curricular and co-curricular opportunities and enhance the academic progress, employability and entrepreneurial skills. The students are provided with career guidance and are made aware of the various careers paths to choose from. Placement training is given top priority to ensure the students are successful during campus placements.

T.J.S Engineering College ensures effective curriculum delivery through a systematic and planned process. Seminars, Industrial Visits, Projects, Industry Interactions, Internships, and Technical sessions are given for experiential as well as participative learning. 372 students have actively participated in Internships and Projects during the year 2022-23. The gap between the syllabus and industry expectation has been met by conducting Value Added Courses. These additional courses are enrich the curriculum and professional skill of the students. In the last five years, 2673 of students got benefited by enrolling in 57 Value added courses.

Faculty members are encouraged to pursue Doctoral programmes and attain additional qualifications to ensure excellence in teaching. They are encouraged to actively conduct research, publish papers in National and International Journals and Conferences. Regular feedback is collected from various stakeholders (students, faculty, alumni, and employers) to ensure the effective implementation of the curriculum. Action taken

Teaching-learning and Evaluation

The T.J.S. Engineering college adopts the guidelines issued by the Directorate of Technical Education of the Government of Tamil Nadu on eligibility criteria and other reservation policies. Every aspect of admission is transparent to every stakeholder. The eligibility criteria and reservation policy are strictly adhered and vacancy if arises, is allotted under lapsed seat category to any eligible students. Currently (AY2022-23) 606 students are studying and 87 faculty working among then 13 faculty are in doctorates and 5 faculty pursuing their Ph.D. The teaching program is scheduled by all the working days as intimated by the University. The pass percentage of the students for the last five years were maintained at average of 90%.

Teachers and students are made well aware of program outcomes and course outcomes. The Institution evaluates the attainment of these outcomes through various means like Continuous Assessment Tests, Model Exams, Practical Classes, Competitions and Extra Curricular Activities, etc. To ensure the quality of teaching, learning, and evaluation processes both the knowledge as well as the cognition dimension, the revised Bloom's taxonomy is referred to by the college as per the regulation.

TJSEC have a centralized Examination committee to conduct internal assessment tests and semester-end examinations. Fair practices and transparency are maintained in the examination and evaluation processes. An online student satisfaction survey about teaching teaching-learning process is performed. Owing to the efforts taken by the faculty members and students, most of the students complete their engineering program within the stipulated time with a good percentage.

For slow learners or failure in assessment, TJSEC take care of such students through mentor/class advisor/HOD to direct the subject handling faculty to conduct remedial classes, retests, and assignments for their academic performance improvements. At the end of the semester, we have a meeting with parents regarding reporting their performance and other dues if any.

Also, TJSEC encourage all students to participate in various academic and non-academic activities like Seminars, symposiums, conferences, and Workshops both internal and external to transform additional knowledge in the current scenario of Industries.

Research, Innovations and Extension

Research, Innovation, and Extension are interconnected processes that drive progress and development in various fields. Research generates new knowledge, innovation transforms ideas into tangible solutions, and extension facilitates the transfer of knowledge and technologies to benefit society. Together, they form a dynamic ecosystem that leads discovery, creativity, and positive change. The institution has created an eco-system for innovation and other initiatives for creation and transfer of knowledge. The faculty members are empowered to take up research activities. The students are motivated to take part in mind blowing competitions organized by various bodies. To meet the emerging academic and research needs, faculty enrichment programmes are conducted. Presently there are **13** Ph.D. holders and 5 faculty members pursuing Ph.D. in our College. The College has received Research grants worth **Rs 19.38Lakhs** from Non-Governmental Organizations. **53** programmes had been organized on the topics related to Research, IPR and Entrepreneurship in the last five years for the benefit of students. There is a steep increase in publication of research papers in reputed National and International Journals every year. Members of Faculty have published 20 papers in UGC Care list Journals and Scopus.11Books / Chapters in Books / Papers in Conference proceedings have been published.The institution insists all the students to be a part of representing various social issues through parallel activities in various students' club. The NSS social changes in neighborhood. Engagement of students in social affairs leads them to become sensitive to the challenges of a developing society. They play a crucial role in promoting innovation adoption, informing decision-making, and fostering sustainable development. **52** Outreach programmes have been organized by our NSS unit in various streams for the enhancement of the society in the last five years.College provides extensive ideas on real time projects by visiting various industries through in-plant training and internship (30 days) for prospective learners. In addition to the above our college has signed **32** MoUs with renowned organizations for the betterment of the students and to provide on the job training, internship, Project in the last five years.

Infrastructure and Learning Resources

T.J.S. Engineering College has been established in the year 2009 with a good infrastructure facility be it physical buildings, machinery, equipment, software, books and other learning resources. Thus, it was built with an impressive and interesting state of art ambience with advance technology and facilities which was suggested by the UGC, AICTE, Anna University. The institution believes that laboratories play vital role in the student's carrier, based on it TJSEC had adapted new cutting-edge technology where students can build up their carrier and be placed in reputed companies. TJSEC has good ambience which is been occupied with 11.02 acres area of with greenery consisting trees and lawn which shows a pleasant atmosphere. The carpet area of the amenities (boy's & girl's common room, toilets, hostels) and the administrative (principal office, HOD and faculty cabins, examination cell, placement office, etc.) are also more than the required area. The instructional (classrooms, tutorial room, laboratories, library and seminar halls, auditorium, workshops, computer centers, etc.,) carpet area is more than the specified area. The total buildup area of the institution is 21,115 SQF.

All laboratories are fully equipped with latest state-of-the-art technology and equipment. The computing facility consists of licensed software and also a good number of open-source software are being used by the faculty. The computing facilities of the TJSEC cater to the needs of faculty and students to foster an effective Teaching Learning Process. There are sophisticated IT facilities like 316 Computers, 16 Printers, 10 Legal Application Software, 30 Multimedia Projectors, 840 Mbps of Internet Bandwidth and 25 secured Wi-Fi connectivity access points. A health computing ratio of 1:1.9 computers to student ratio is being maintained. The library with an area of 407.31 SQM is located in ground floor with a seating capacity of 70. The digital library is equipped with 10 PCs which are connected with Wi-Fi and LAN for fast and seamless access of the

Internet for streaming NPTEL lectures and using e- resources for the benefit of its users.

Student Support and Progression

In TJSEC the eligible students were received the Backward Class, Most Backward Class, SC, ST, First Graduate and 7.5% scholarships from the government. Our institution also provides full and partial fee concessions for the socially and economically backward meritorious students. The average percentage of students benefited during the period 2018 - 2023 is 77.33%.

Five soft skills programs were arranged during AY 2022 – 23 for the final year students to improve their inter and intra-personal skills, self development and interview skills.

In order to improve the Language and Communication skills, 5 workshops were arranged periodically during the AY 2022-23.

Talk on 'Life Skill Today' was arranged to our students to improve their physical fitness. 'Yoga for Beginners' Training programs were conducted for improving the physical and mental strength of the students.

The institution arranges awareness program on cyber crime and seminars to improve the coding and decoding skill of the students. The number of Life skills and ICT conducted were 4 each during AY 2022 – 23.

As per the directions of All India Council for Technical Education, Anti-Ragging Committee, Internal Complaint Committee, Students Redressal Committee, Sexual Harassment Committee were constituted. Toll Free Number was displayed for informing the harassment.

Students have secured 185 medals for their successful participation in the national level sports and cultural organized by other institutions from 2018 to 2023.

There is a separate placement cell in our college. Placement training programs are organized for the students for improving the required skills to attend the placement interview confidently. An average of 74% of the students was placed during the period 2018 – 2023.

Alumni association of our institution is functioning from our college with a faculty coordinator. The number of students registered as members during AY 2022 -23 is 201. The alumnus is invited to our college to give talks on their fields and to act as chief guest for the college level functions. They are extending their financial support for the development of our institution. The alumnus meet is organized every year during the last week of February.

Governance, Leadership and Management

The organizational structure is well planned in order to achieve the vision and mission of the college. The delegation of powers to the authorities makes the governance effective and efficient. Various committees and councils are formed to enhance the work under IQAC. Academic documents are being digitized and are well maintained. The service rules have been formed for better governance. Various bodies are created to execute the works in time.

E- Governance is introduced in TJSEC for various purposes like, Bio-metric systems, ERP for documenting various activities connected with the Administration, Finance and Accounts, student's Academic data, library, and payment of fees, Examination, transport and hostel. Tally and other accounting software are used in the day to day activities.

TJSEC has taken Welfare measures for the betterment of the staff members. The faculty members regularly attend Faculty Development Programme in order to keep abreast of Knowledge. TJSEC is also support to faculty by financially for participating various conference and workshop.

TJSEC conduct 15 Faculty Development Programme and Management development programme (FDP &MDP) in last five years. TJSEC is concerned about the personal welfare and health issues of the staff through group medical insurance scheme and they are permitted to avail maternity leave and Medical leave. Institution conducts internal and external financial audits yearly once.

IQAC of the college monitors the teaching learning process. The institution reviews its teaching learning process, structures & methodologies of operations and learning outcomes at periodic intervals through IQAC set up as per norms. In every academic year, IQAC conduct two meetings to set the target and work plan. Ensure the quality of system, TJSEC invite external academic experts to conduct academic audit for every year. ISO audit also implemented as per the international standard by external ISO agency. TJSEC signed MOU with three Educational Institutions to conduct collaboration activities like workshop, seminar and guest lecture etc., TJSEC is also participated NIRF ranking in various categories.

Institutional Values and Best Practices

TJSEC gives equal chances to both the genders in terms of admissions, training, placement, co-curricular and extra-curricular activities, so that gender problems do not arise. There are various committees headed by the senior faculty members who inculcate human values in the minds of our students. Our College has always initiated in displaying the best institutional values and practices. The college promotes gender equity and sensitivity through various gender equity promotion programmes. Common rooms are available for girls and boys. Several activities are conducted for the promotion of national values and communal harmony. Annual power requirement is met by the renewable energy and alternative source of energy. The college has installed waste management technology and rainwater harvesting system. Our campus is eco-friendly and located in a serene area suitable for various educational activities. The institution takes care to implement eco-friendly practices in all its activities. Most of our activities are organized to make students aware of the importance of protecting the environment. Several awareness programs are conducted for the students and it also provides space to conduct various government and non-government competitive examinations. Staff, students and the stakeholders enjoy the association with the institution due to its transparency in entire process of academics and administration. Our college is ever conscious of making the place more fit to live in. The institution tries to practice the green movement into its regular pattern. The institution includes Green, Energy and Environment Audit in its policy documents confirming its focus on applying it in the course of action. The college provides special facilities for the differently-abled students. The purpose of this provision is to offer quality education and aims to bring them into the mainstream of society. The college administration is always pleased and enthusiastic in extending complete support for the overall progress of the student. The college faculty and students have responsibly engaged with people and communities, fulfilling its role in making knowledge and information accessible to people.

2. PROFILE

2.1 BASIC INFORMATION

Name and Address of the College	
Name	T.J.S.ENGINEERING COLLEGE
Address	T.J.S. ENGINEERING COLLEGE T.J.S NAGAR, PERUVOYAL, NEAR KAVARAIPETTAI, GUMMIDIPOONDI TALUK, TIRUVALLUR DIST-601206
City	Chennai
State	Tamil Nadu
Pin	601206
Website	www.tjsec.in

Contacts for Communication					
Designation	**Name**	**Telephone with STD Code**	**Mobile**	**Fax**	**Email**
Principal	J.PRAKASH	044-27967602	7373730006	-	principal@tjsec.in
IQAC / CIQA coordinator	E.SIVAKUMAR	044-27967628	8778420491	-	iqac@tjsec.in

Status of the Institution	
Institution Status	Private and Self Financing

Type of Institution	
By Gender	Co-education
By Shift	Regular

Recognized Minority institution	
If it is a recognized minroity institution	No

Establishment Details

State	University name	Document
Tamil Nadu	Anna University	[View Document](#)

Details of UGC recognition

Under Section	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 Regulatory Authority	Recognition/Approval details Institution/Department programme	Day,Month and year(dd-mm-yyyy)	Validity in months	Remarks
AICTE	[View Document](#)	14-06-2023	12	
AICTE	[View Document](#)	14-06-2023	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

Location and Area of Campus

Campus Type	Address	Location*	Campus Area in Acres	Built up Area in sq.mts.
Main campus area	T.J.S. ENGINEERING COLLEGE T.J.S NAGAR, PERUVOYAL, NEAR KAVARAIPETTAI, GUMMIDIPOONDI TALUK, TIRUVALLUR DIST-601206	Rural	11.02	21115

2.2 ACADEMIC INFORMATION

Details of Programmes Offered by the College (Give Data for Current Academic year)						
Programme Level	Name of Programme/Course	Duration in Months	Entry Qualification	Medium of Instruction	Sanctioned Strength	No.of Students Admitted
UG	BE,Computer Science And Engineering,	48	HSC	English	90	90
UG	BE,Electrical And Electronics Engineering,	48	HSC	English	30	18
UG	BE,Electronics And Communication Engineering,	48	HSC	English	60	56
UG	BE,Mechanical Engineering,	48	HSC	English	60	18
UG	BTech,Artificial Intellegents And Data Science,	48	HSC	English	60	60
PG	ME,Computer Science And Engineering,Computer science and Engineering	24	UG	English	18	3
PG	ME,Electronics And Communication Engineering,VLSI Design	24	UG	English	9	1
PG	MBA,Master Of Business Administration,	24	UG	English	60	52

Position Details of Faculty & Staff in the College

Teaching Faculty												
	Professor				Associate Professor				Assistant Professor			
	Male	Female	Others	Total	Male	Female	Others	Total	Male	Female	Others	Total
Sanctioned by the UGC /University State Government	8				19				60			
Recruited	6	2	0	8	15	4	0	19	35	25	0	60
Yet to Recruit	0				0				0			
Sanctioned by the Management/Society or Other Authorized Bodies	0				0				0			
Recruited	0	0	0	0	0	0	0	0	0	0	0	0
Yet to Recruit	0				0				0			

Non-Teaching Staff				
	Male	Female	Others	Total
Sanctioned by the UGC /University State Government				17
Recruited	13	4	0	17
Yet to Recruit				0
Sanctioned by the Management/Society or Other Authorized Bodies				0
Recruited	0	0	0	0
Yet to Recruit				0

Technical Staff				
	Male	**Female**	**Others**	**Total**
Sanctioned by the UGC /University State Government				12
Recruited	11	1	0	12
Yet to Recruit				0
Sanctioned by the Management/Society or Other Authorized Bodies				0
Recruited	0	0	0	0
Yet to Recruit				0

Qualification Details of the Teaching Staff

Permanent Teachers										
Highest Qualification	**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.	5	2	0	4	0	0	2	0	0	13
M.Phil.	0	0	0	0	0	0	1	7	0	8
PG	1	0	0	11	4	0	32	18	0	66
UG	0	0	0	0	0	0	0	0	0	0

Temporary Teachers									
Highest Qualification	Professor			Associate Professor			Assistant Professor		
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt/LLD/DM/MCH	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 Qualification	Professor			Associate Professor			Assistant Professor		
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt/LLD/DM/MCH	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 engaged with the college?	Male	Female	Others	Total
	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	141	16	0	0	157
	Female	80	5	0	0	85
	Others	0	0	0	0	0
PG	Male	38	0	0	0	38
	Female	18	0	0	0	18
	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	27	20	6	12
	Female	24	7	4	9
	Others	0	0	0	0
ST	Male	2	0	0	0
	Female	3	0	0	0
	Others	0	0	0	0
OBC	Male	86	60	16	33
	Female	37	20	8	32
	Others	0	0	0	0
General	Male	4	13	4	23
	Female	8	5	2	6
	Others	0	0	0	0
Others	Male	0	0	0	0
	Female	0	0	0	0
	Others	0	0	0	0
Total		191	125	40	115

Institutional preparedness for NEP

1. Multidisciplinary/interdisciplinary:	Multidisciplinary education is a vital part of India's modern education system. TJSEC which is affiliated to Anna University embrace this concept and offers various Engineering and Management programs to students to access to a wider knowledge base and skills and make them ready for a world that is ever changing. The programs are structured according to the Choice Based Credit System (CBCS), with specific credit recommendations. Each course is categorized as Core, Professional Elective, Open Elective, Skill-Based, or Value-Based and carries a specific number of credits. Almost all PG and UG programs include experiential learning components in the form of projects, study tours, field visits, and internships. All UG students take an environmental studies course as part of their curriculum to help them become eco-conscious and aware of environmental challenges. The college understands that today the emphasis is on addressing a problem of social, economic, business or industrial relevance and the challenge is to integrate knowledge and skill sets from different areas of knowledge to provide an interdisciplinary solution. The Institute is actively working to follow the recommendations made in the NEP Guidelines into practice.
2. Academic bank of credits (ABC):	Under the ABC system, students can earn academic credits for courses completed and can be transferred to other institutions or used towards obtaining a degree. The provisions of cross learning and earning credits across disciplines would confirm lifelong learning as per the choice of students to monitor their stock of credits. ABC aims to simplify the credit transfer process and provide a continuous experience for students seeking to pursue further education. The faculty members can access to study material with content related to the topics prescribed in the syllabi. The faculty members are also encouraged to provide additional study materials through online.
3. Skill development:	The Institution encourages the faculty members and students to develop skills. The Institution conducts specialized skill development programs such as aptitude training, communication training to augment the skills. The Institution also organizes life skill programs. Training focused on soft skills and capacity building are provided to the students. Several co-curricular and extracurricular activities are

geared towards Skill development. Students receive instruction on moral development by celebrating National festivals, Environmental day, Voter's Day, along with competition. Students' talents are encouraged through NSS, YRC and Fine Arts Club. The upskill of the students is improved from the first semester through Cambridge English Course, an initiative of Tamil Nadu Government.

4. Appropriate integration of Indian Knowledge system (teaching in Indian Language, culture, using online course):	Indian culture needs to be maintained and preserved for future generations through systematic spreading of information about culture, languages, and traditions through our education system. Cultural awareness and expression are among the major skills considered important among students as it provides them with a sense of uniqueness. Studying in the native language boosts confidence and self-motivation. All the learners are benefited when they learn in a known language. Additionally, it is thought that receiving an education in one's mother tongue can foster the development of fundamental social abilities like critical thinking and reading. The college offers a variety of awareness programs to the students about the environment, sustainability, energy conservation, the arts, culture, and traditions of our nation through various clubs.
5. Focus on Outcome based education (OBE):	Outcome-Based Education (OBE) is a student-centric teaching and learning methodology in which the course delivery, assessment are well planned to attain specified objectives and outcomes. It aims on gauging student performance at different levels. The college encourages the faculty to participate in many orientation programs, seminars, workshops and webinars to update themselves on various aspects of outcome-based learning. The Institution also confirms to consider innovative teaching practices. All courses are planned as per Blooms Taxonomy. The college motivates students to participate in short-term certificate courses, seminars, field trips, industrial visits, internships, placements, orientations, and other activities to gain practical experience.
6. Distance education/online education:	TJSEC is an affiliated institution that offers only regular programs. It lacks authorization to provide online and distant learning. However, online instruction and assessment have been effectively carried out during the COVID-19 epidemic through Zoom and Google Classroom platforms. The students

are guided to pursue certificate courses apart from their regular curriculum. The college conducts online assessments, webinars, quizzes, and assignments by which the students are greatly benefitted.

Institutional Initiatives for Electoral Literacy

1. Whether Electoral Literacy Club (ELC) has been set up in the College?	Yes. The Electoral Literacy Club at T.J.S. Engineering College has been formed to educate future voters about enrolment and other electoral process. The Club educates the students on constitution of India and its democratic policies.
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?	Yes. The College has an Electoral Literacy Club comprising of two Nodal officers and the students' coordinators to execute various election awareness campaigns.
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.	The club conducts interesting activities and seminars to familiarize the future voters with the electoral process. Mr. M Vidhuran Kumar, Assistant Professor / S & H, faculty coordinator actively involves the staff and students through various methods to spread the importance of voting among the general public.
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.	The ELC of our College organized voters day awareness Marathon programme in association with VAO of Gummidipoondi to educate people about the importance of voting and the electoral process.
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.	The college encourages the students above 18 years to enlist as voters. It also guides the students to link their Aadhar with the electoral rolls. ELC aims to spread voter awareness amongst who are above 18 years in college and rural areas. It encourages the students to understand that Voting in a democracy is of highest importance as it allows the citizens choose their representatives in forming the government.

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
606	519	535	753	1027

File Description	Document
Upload Supporting Document	[View Document](#)
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: 176

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
87	89	96	103	108

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
137.3	61.49	44.71	268.10	472.14

File Description	Document
Upload Supporting Document	[View Document](#)

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:

T.J.S Engineering College was started in the year 2009. The college, which is affiliated to Anna University, Chennai and approved by AICTE, New Delhi, offers five undergraduate programmes and two Post graduate programmes.

The college strictly follows the curriculum and syllabi as prescribed by the Anna University, Chennai. The various academic activities are planned by the Heads of the Department of our college with the help of academic schedule prescribed by the Anna University.

Students and faculty are made well aware of the Program Outcome and Course Outcome. The administrative system of T.J.S. Engineering college is formulated in such a way that it confirms the attainment of the PEOs.

Course file for theory subject and laboratory course are prepared well in advance which includes, Students name list Syllabus copy, Course Objectives, Course Outcomes, CO-PO mapping, Course delivery plan, content beyond syllabus, Time Table, Internal Assessment question papers, Previous year question papers, end semester University question papers, question paper feedback, Log Book and batch details.

Students' participation in course work is ensured by the mandatory minimum attendance in the class, the norms for which are set by the University. Assignments are regularly given to inculcate the learning process in students to have a better understanding of the subject.

Our college follows a systematic examination process, where standard question papers are set. Continuous Internal Evaluation is done periodically and transparency of evaluation system is ensured through Internal Assessment committee.

Test is conducted in every Unit and the students who fail to score more than 70% need to appear for the retest. HoDs compile test reports and remedial measures are discussed.

Model Exam and Model Practicals are habitually conducted before the board Examination in order to make aware of the Examination Pattern.

Record of attendance and assessment which contains details on overall performance of every student is

maintained by the faculty in every Theory and Laboratory session.

The college has a mentor system to monitor the overall performance of the students. The mentor records the profile of all the assigned students with regards to their academic performance and participation in club activities and any other initiative.

Our faculty encourages the students to take up value added courses and to take part in technical events such as paper presentations, project presentations, quiz, design challenge, hackathons in order to make them more competitive to the current scenario.

The college provides assistance in all forms to accomplish Mini Projects and Students are directed to Industry for the successful completion of final year projects.

Class committee meetings are conducted where students' representatives can express their difficulties in the academics, administrative and facility issues. Students are encouraged to provide a thoughtful Feedback.

At the end of each semester, the faculty meeting is arranged in which there is a detailed discussion of execution of teaching learning activities.

File Description	Document
Upload 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: 57

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](#)

Other Upload Files	
1	[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: 77.7

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
402	390	451	585	845

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:

The college focusses on the performance of the students. Programs are regularly organized connected to Gender Equity, Sustainability, Human Values and Ethics. The college involves the students in several activities through different clubs to create awareness among them.

Professional Ethics

Our college always aims to impart good human values among students and believes in making each student a principled Engineer. Being an affiliated institution, the college follows the University's prescribed curriculum which has integrated cross-cutting topics relevant to environmental sustainability, human rights and professional ethics in various courses.

Gender Equality

TJSEC gives equal chances to both the genders. The college inculcates human values among the students through various committees. The college has taken several measures to enhance the mental well – being of the students and act as a shield on campus. College has Anti ragging committee to ensure ragging free campus. Any form of ragging or misconduct directed towards a student will be considered a criminal offense and promptly reported to the police.

Environment and Sustainability

Our college is an eco-friendly campus. The institute encourages the students to gain an understanding and awareness of environmental issues such as pollution, global warming and other global environmental concerns. The college focusses on water conservation, use of alternative sources of energy and E-waste management regularly. It also motivates on how each individual can reduce, reuse, and recycle to make Earth greener and sustainable.

Energy Conservation

We have always attempted to make our students understand the need to save energy. Various measures for energy conservation have been taken up by the institution.

Rain water harvesting

Rain water harvesting units have been set up in the college in order to increase the water table, as a part of conservation and preservation of natural resource - water.

Biogas Plant

Biogas plant has been installed with a capacity of 10 kg to reduce the use of cylinder consumption.

Efforts for Carbon Neutrality

The institute stresses the importance of carbon neutrality and its impact on society. The institution discourages vehicles from entering the main courtyard of the campus, thereby helping to reduce noise and air pollution.

E-Waste Management

The Institution produces only a small quantity of hazardous waste. Efforts are taken to identify the sources of e-waste in the institution through its effective e-waste management system and it disposes the e-waste materials through proper channel.

Human Values

Our college stresses the importance of inculcating high human values in students to make them good members of the society. We can proudly claim that our college NSS unit and YRC are ever- ready to work for the betterment of the society.

The NSS unit of the College involves the students in plantation programs both inside and outside the College campus. The ultimate aim of such plantation programs is to develop in our students an interest, awareness and responsibility towards environment and its protection.

File Description	Document
Upload Additional information	[View Document](#)

1.3.2

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

Response: 48.68

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

Response: 295

File Description	Document
Upload supporting document	[View Document](#)
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	[View Document](#)
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: 30.73

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
191	125	40	115	166

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

2022-23	2021-22	2020-21	2019-20	2018-19
327	357	357	516	516

File Description	Document
Institutional data in the prescribed format	[View Document](#)
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](#)
Provide Links for any other relevant document to support the claim (if any)	[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: 37.62

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
179	107	34	86	132

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
226	246	246	356	356

File Description	Document
Institutional data in the prescribed format	[View Document](#)
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: 6.97

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:

The learning process is altered by the application of student-centric strategies like problem-solving techniques and experimental learning. The institution's main goal is to enhance teaching and problem-solving techniques through a variety of initiatives. The New Technology Mobile Servicing and Training Institute offers workshop, value-added courses and hands on training in servicing. Numerous Memorandums of Understanding have been linked with fem logics, Nipix technology and BSNL in order to enhance students' practical learning skills and their capacity to solve problems in real time in an industrial setting. Every semester, the department arranges a minimum of two industrial visits, in-plant training and an internship for the students. These opportunities provide them with a wealth of experience in problem-solving, project work and the creation of prototype models, all of which are encouraged for students at all levels. Practical sessions are utilized to facilitate experimental learning for every subject, industrial visits as well as an internship. Participant learning is adopted in laboratory classes, Power Point presentations, NPTEL videos and then demonstrations are practiced during the lab session. The placement cell is also actively organizing various events and programs to enable active participation in learning. Students were encouraged to participate in paper presentation in conferences and symposium conducted by other colleges to improve their Subject knowledge. Digital infrastructure is updated day-by-day to support all aspects of experimental learning. Classrooms adopting participative learning often include discussions and debates where students express their opinions, ask questions and engage in critical thinking. This helps develop analytical and communication skills. Encouraging students to solve problems independently or in groups promotes a deeper understanding of the subject matter. This approach emphasizes the application of knowledge to real-world scenarios. Students are instructed to take seminars related to subject topics to improve their communication skill.

Information and Communication Technology (ICT)-enabled tools are used by teachers to facilitate effective teaching and learning. It is used to optimize, improve and support information transmission. It renders more support to the teachers for writing lesson plans, maintaining records, presenting material and conducting online searches.

The institution uses the following ICT tools:

1. Projector: Classrooms and labs are equipped with more than 37 projectors.

2. Computer laboratories setup of desktops and laptops make them conveniently accessible.

3. Printers, scanners and photocopy machines are kept at required places.

4. There are two seminar halls which are used for conducting conferences, seminars and guest lectures. They are furnished with projectors and digital amenities.

5. Zoom meetings, Google Meet, Microsoft Teams, and Google Classrooms are used for online classes/seminar/Guest Lecture/Workshops.

6. Other e-resource methods include the usage of e-books, DELNET, NPTEL and digital libraries.

7. Smart Board classrooms are available in the college to show online video presentation.

Use of ICT by faculty:

1. Power Point Presentation: Teachers use PowerPoint presentations (PPTs) and projectors to deliver lessons.

2. Online feedback – Instructors use Google Forms to get feedback from students after completing every event.

3. For long-term learning and reference, video conferencing and video lecturing are also recommended.

File Description	Document
Upload Additional information	[View Document](#)

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
87	89	96	103	108

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: 11.59

2.4.2.1 **Number of full time teachers with NET/SET/SLET/Ph. D./ D.Sc. / D.Litt./L.L.D year wise during the last five years**

2022-23	2021-22	2020-21	2019-20	2018-19
13	16	13	9	5

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](#)
Provide Links for any other relevant document to support the claim (if any)	[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:

T.J.S. Engineering College adheres to the university's examination schedule and is associated with Anna University, Chennai. The evaluation process completely complies with Anna University norms. Three internal assessment exams are given. The academic calendar of the institution, which is created based on the academic calendar of the university, is used to notify teachers and students about the dates of internal examinations at the beginning of every semester.

Internal Assessment

T.J.S. Engineering College administered three internal assessment tests during the pandemic period, and the results were posted in the Google Classroom (GCR) for their satisfaction. All subject teachers kept track of the absentees, and the Head of the Department announced the date on which they would have another opportunity to retake the test.

After the pandemic period Continuous Assessment Test (CAT) system was redesigned by the institute to make it more student-centric rather than faculty-centric. The Affiliate University and the Institution's calendars were taken into consideration when the Institute Exam Cell developed instructions for administering the CAT. The following changes have been successfully implemented by the criteria for conducting CAT:

1. CAT-1 & CAT 2 is scheduled after the consecutive period of 1 month covering 2 units.
2. Model exam is scheduled after the 1 month period of conducting CAT-2, covering all 5 units.

1. Organizing the Continuous Assessment Test - CAT-1, CAT-2, and Model Exam Seating Charts, and Hall Invigilators.
2. Creating the continuous assessment test question paper according to the recommended format utilizing the updated Bloom's taxonomy and knowledge level.

The result analysis meeting will be conducted in Department level with principal. The low pass percentage faculty will explain the failure of the students and remedial actions is initiated.

External assessment

Theory and practical course evaluations are graded 20% on the continuous assessment test and 80% on university exams at the end of the semester. The methodology for evaluating laboratory courses is the same as that used for theoretical courses. Via observations and viva questions, the student is evaluated during every lab session.

Subject wise Practical sessions will be conducted for 60 hours. The external lab exam will be conducted under the supervision of other college faculty member which is nominated by Anna University. As per the scheduled time table from Anna University theory exams will be conducted under the supervision of Internal/External Staff member and Anna University representative.

Periodic project evaluations including important factors such as issue statements, comprehension of the project, presentation abilities, concept communication, technical expertise, teamwork, and project management are used to evaluate the project course. Review meetings are arranged by the project review committee to evaluate each project batch's progress. Counseling is one way to help slow learners to do better in the future based on their performance in continuous assessments. Academic and non-academic challenges, as well as personal issues, are resolved in counseling sessions.

File Description	Document
Upload 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:

T.J.S Engineering College offers Bachelor of Engineering- B.E in Civil, CSE, ECE, EEE, & Mechanical

Engineering and Master of Engineering- M.E in CSE, & VLSI Design. As per the University guidelines, our institution evolved a system/policy about Choice Based Credit System (CBCS) /General Interest/Hobby/Sports/NCC/NSS/related courses on its own.

The present curriculum goes with the Learning Outcome-based Curriculum Framework (LOCF) for all its Undergraduate programs and Post Graduate programs. The Program Outcomes of courses are to be achieved.

The Programme Educational Objectives of courses are as follows:

- To enable graduates to pursue research, or have a successful career in academia or industries associated with all Engineering disciplines, or as entrepreneurs.
- To provide students with strong foundational concepts and also advanced techniques and tools to enable them to build solutions or systems of varying complexity.
- To prepare students to critically analyze existing literature in an area of specialization and ethically develop innovative and research-oriented methodologies to solve the problems identified.

All the UG/PG programs in the institution have twelve common program outcomes Engineering Knowledge, Problem Analysis, Design /Development of the Solution, Investigation of Complex Problem, Modern Tool Usage, The Engineer and Society, Environment and Sustainability, Ethics, Individual and Teamwork, Communication, Project Management and Finance, Life-Long Learning.

Based on the Program Outcomes, each department defines two or three program Specific Objectives of courses as follows:

- To analyze, design, and develop solutions by applying foundational concepts of all discipline engineering courses.
- To apply design principles and best practices for developing quality products for scientific and business applications.
- To adapt to emerging concepts of all discipline engineering courses to innovate ideas and solutions to existing/novel problems.

Mapping of programme outcome and course outcome is done and attainment level is also calculated for each subject based on student performance in internal assessments. All three outcomes namely Program Outcomes (PO), Course Outcomes (CO), and Program-Specific Outcomes (PSO) are shown in the website, and in a prominent location in the college campus.

File Description	Document
Upload Additional information	[View Document](#)

2.6.2

Attainment of POs and COs are evaluated.

Explain with evidence in a maximum of 500 words

Response:

The course attainment level is evaluated, using the Bloom's taxonomy of the learning domain. The students who have scored less than 70% are motivated and guided through remedial classes, class tests, re-tests, quizzes, and objective tests which are used to assess the attainment of Course Outcomes (CO).

To meet program outcomes not covered by the regular curriculum, the co-curricular, extra-curricular activity, industrial visits, and training program are arranged. Course outcomes are calculated using both internal assessment and university exam performance. Assessment tools are designed to evaluate the attainment of the Course Outcomes (COs). It is important to select assessment tools that align with the specific COs of the course and to use multiple assessment tools to provide a comprehensive evaluation of student learning. The assessment tools are chosen based on the specific course outcomes being assessed and the teaching methods being used in the course.

The evaluation of the Course Outcome (CO) involves the use of both direct and indirect assessment tools, with greater weightage assigned to the former. Specifically, 80% weightage is given to direct assessment tools, and 20% indirect assessment tools. The performance of students in both internal (direct) and external (indirect) assessments is taken into account, with appropriate weightage assigned to each.

The institution evaluates the attainment of COs, POs, and PSOs through its evaluation system, and the process is mentioned below.

The artifacts that demonstrate the skills, personal characteristics, and accomplishments required for measuring the attainments are collected from:

1. Direct Attainment
2. In-Direct Attainment

CO Attainment:

Computation of Direct CO Attainment in the course:

20% of Internal Assessment Test Attainment + 80% of End Semester Exam Attainment

Computation of Overall CO Attainment in the course:

80% of Direct CO Attainment + 20% of In-Direct CO Attainment

The assessment of Course Outcomes (COs) is evaluated using assessment tools, which include internal and external assessments. Internal assessments contribute 80% and external assessment contributes 20% to the overall assessment of COs.

CO Direct Attainment of a Course:

Computation of CO In-Direct Attainment in the course:

Attainment of CO in a course = ((Level 1 x No. of Students Attempted) + (Level 2 x No. of Students Attempted) + (Level 3 x No. of Students Attempted))/ Total No. of Students.

COs INDIRECT ASSESSMENT TOOLS

End of Semester Course Evaluation Form:

During the survey, students provide their responses on a given scale to the questions which are the COs of the respective courses. The procedure to measure the Indirect-CO attainment of a course is the same as the direct attainment method, where the results are student's responses.

PO and PSO Attainment:

Evaluations of attainment of POs and PSOs based on 80% of direct assessment + 20% of indirect assessment combined to arrive at the Final Evaluation.

Computation of PO Attainment in the course:

PO = (Weighted Average Value of PO x CO Attainment Average)/3

Computation of PO Attainment in the course:

PSO = (Weighted Average Value of PSO x CO Attainment Average)/3

File Description	Document
Upload Additional information	[View Document](#)

2.6.3

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

Response: 92.04

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
108	145	215	252	332

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
122	166	217	253	385

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](#)
Provide Links for any other relevant document to support the claim (if any)	[View Document](#)

2.7 Student Satisfaction Survey

2.7.1

Online student satisfaction survey regarding teaching learning process

Response: 3.98

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: 19.38

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
10.16	4.835	0	4.305	0.075

File Description	Document
Upload supporting document	[View Document](#)
Institutional data in the prescribed format	[View Document](#)

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:

RESEARCH AND DEVELOPMENT CELL:

The Research and Development cell of T.J.S Engineering College is a cell within an organization that is dedicated to inspire the faculty and students for creating, testing, and improving products, services, or processes. The Cell is responsible for exploring new ideas, technologies, and innovations to help the organization stay competitive and meet the needs of its customers. R&D cell has collaborated with other departments and external partners to drive innovation and bring new solutions to the market. R&D cell with other faculty members has collaborated with external Government and Non-Government agency to establish around 7 projects in the last 5 years. Department of Electrical and Electronics Engineering have received three funded projects from TNSCST in the last five years. Department of Electronics and Communication Engineering have collaborated with Pioneer Coatings for a project in the year 2019-2020. Department of Electrical and Electronics Engineering have collaborated with Subham

Kitchen world for a project in the year 2021-2022. Department of Civil Engineering has collaborated with My way Enterprises for a project in the year 2022-2023. Department of Mechanical Engineering has collaborated with APVK Infra Private Limited for a project in the year 2022-2023.

ENTREPRENEURSHIP DEVELOPMENT CELL:

Entrepreneurship embodies the spirit of innovation, creativity, and resilience. It's a journey marked by risks, challenges, and countless learning opportunities. In this write-up, we delve into the world of entrepreneurship, exploring its essence, key characteristics and the indispensable role it plays in driving economic growth and societal progress.

Entrepreneurship development cell is a driving force behind economic growth and prosperity. It creates jobs, fosters innovation, and fuels competition, ultimately leading to increased productivity and wealth creation. Moreover, entrepreneurship plays a vital role in addressing societal challenges, whether through technology-driven solutions, social enterprises, or sustainable business practices.

The Entrepreneurship Development Cell has done various activities in the past five years for developing knowledge and motivating students for becoming a great entrepreneur.

Entrepreneurship development cell has signed MOU's with the following partners Entrepreneurship Development and Innovation Institute, Government of Tamilnadu, Centre for Entrepreneurship, Anna University, Department of Science and Technology, Government of India, The National Science and Technology Entrepreneurship Development Board, Entrepreneurship Development Institute of India, Ahamedabad, Gujarat, Pradhan Mantra Yuva Yojana and NIESBUD, National Small Industries Corporation.

INTELLECTUAL PROPERTY RIGHTS (IPR) CELL:

Intellectual Property Rights Cell is an organizational unit within an institution dedicated to managing, protecting, and exploiting intellectual property assets. Intellectual property refers to creations of the mind, such as inventions, literary and artistic works, designs, symbols, names, and images used in commerce. The primary functions of IPR Cell formulating plans for the generation, safeguarding, and administration of intellectual property assets in line with the college's objective.

These assets are protected by law through patents, copyrights, trademarks, and trade secrets. 16 patents have been filed by our faculties in the last 5 years.

Overall, an Intellectual Property Rights Cell plays crucial role in safeguarding the college's intangible assets, fostering innovation and creativity, and maximizing the value derived from intellectual property assets.

File Description	Document
Upload 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: 53

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
22	13	2	8	8

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: 0.11

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
11	6	0	1	2

File Description	Document
Link to the uploaded papers, the first page/full paper(with author and affiliation details)on the institutional website	[View Document](#)
Link to re-directing to journal source-cite website in case of digital journals	[View Document](#)
Links to the papers published in journals listed in UGC CARE list or	[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](#)

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
2	3	4	2	0

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](#)
Provide Links for any other relevant document to support the claim (if any)	[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:

TJS Engineering College has involved in many extension activities to promote social responsibilities among the students, through conducting activities of the Youth Red Cross (YRC) and National Service Scheme (NSS) clubs play vital roles in promoting social welfare, community service, and personal development among students. Below is a description of each club

NATIONAL SERVICES SCHEME:

The primary objective of NSS is developing the personality and character of the student youth through voluntary community service. 'Education through Service' is the purpose of the NSS.

- "Not Me But You" defines the philosophy of NSS. The welfare of every individual is dependent on the welfare of society, hence, every volunteer must strive for the betterment of society
- T.J.S.E.C has been doing NSS Activities in and around villages of the Thriuvallur District some of the villages benefited through our NSS Team.
- The students of TJS Engineering College have regularly volunteered themself at Arulmigu Muneeswarar Angala Eswari Temple in Padiyanallur, Thiruvallur district and Andar Kuppam Murugan Temple, Andar Kuppam in Thiruvallur district. The students of TJSEC have regularly volunteered themself at Siruvapoori Murugan Temple at Siruvapuri, Thiruvallur district. Our students have conducted various programmes such as pollution prevention, awareness program on Dengue fever, awareness program on Drug free society at Gummidipoondi in association with the Gummidipoondi Government Hospital, Thiruvallur district. at Peruvoyal. The students of TJS Engineering College have conducted various programmes on AIDS awareness, pollution protection. Student participated in a campus cleaning and tree plantation programme at Government Higher secondary school, New Gummidipoondi, Thiruvallur district.

- The students have arranged various awareness programmes One day Awareness programme on plastic pollution in Panchayat union Middle school, kumaranpettai, Thiruvallur district, One day General Health Awareness programme association with Kumaranpettai panchayat office at kumaranpettai village, Thiruvallur district, Road safety awareness programme in association with Road Transport official kavaraipettai at, Voters day Awareness Rally associated with Village Administartive officer Gummidipoondi, Cancer Awareness programme at M.K.V Government boys higher secondary school, Arani association with Primary Health center, Arani. The students volunteered for Campus cleaning & tree plantation at Panchayat union Middle school, kumaranpettai, Thiruvallur district, Campus cleaning drive at M.K.V Govt boys Higher secondary school, Arani, Thiruvallur district.

YOUTH RED CLUB:

The Youth Red Cross Club is a student-led organization affiliated with the Red Cross that focuses on promoting humanitarian values, community service, and health education among young people. Members of the Youth Red Cross Club often engage in various activities such as organizing blood

donation drives, first aid training sessions, disaster preparedness workshops, and community outreach programs. It provides a platform for young individuals to make a positive impact in their communities and contribute to humanitarian efforts.

The Youth Red Cross Club has created various programmes for the welfare of the students and faculty members of the college and society. The Youth Red Cross was established in the year 2021.

The Youth Red Cross Club conducted programmes such as Blood Donation Camp with Chennai Blood Centre, Awareness program on cancer prevention and many other programmes.

File Description	Document
Upload Additional information	[View Document](#)

3.4.2

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

Response:

The Institution has received remarkable awards from Government Organizations and Non Government Organizations for the contributions to the National Service Scheme, Eco Club and YRC for the Village People in and around Chennai and Thiruvallur District.

? Received appreciation from Executive Officer at Andar Kuppam Murugan Temple, Andar Kuppam for Organizing One day Event Clean Temple at Andar Kuppam Temple to Clean up the Temple Campus on 03.05.2023.

? Received appreciation from Executive Officer at Andar Kuppam Murugan Temple, Andar Kuppam for Organizing Mass Tree Plantation at Andar Kuppam Temple on 02.05.2023.

? Received appreciation from Panchayat Union Middle School Head Master, Kumaranpettai for Organizing One day Awareness Programme on Plastic Pollution at Panchayat Union Middle School on 21.04.2023.

? Received appreciation from Panchayat Union Middle School Head Master, Kumaranpettai for Organizing One day Event Clean Campus at Panchayat School to Clean up the school Campus on 20.04.2023.

? Received appreciation from Panchayat President, Kumaranpettai for Organizing One day Awareness Programme on Plastic Pollution at Kumaranpettai Village on 12.04.2023.

? Received appreciation from Panchayat President, Kumaranpettai for Organizing One day Event to clean up the area at Kumaranpettai Village on 10.04.2023.

? Received appreciation from Chennai Blood Centre or Organizing Blood Donation Camp in T.J.S. Engineering College on 24.02.2023.

? 3.4.2 Awards and recognitions received for extension activities from Government / Government recognized bodies.

? Received appreciation from Thasildhar - Gummidipoondi for Organizing Voter Awareness in Gummidipoondi on 25.01.2023.

? Received award from Fire Station Officer for Maintaining safety against Fire in T.J.S. Engineering College in the year 2022-2023.

? Received Fire License from Fire Station Officer, Gummidipoondi on 15.02.2023 in T.J.S. Engineering College.

? Received "Best Green Campus Award-2023" from Mass Auto Components Moulding Division for maintaining the Campus Green and offering an Eco-Friendly Environment in T.J.S. Engineering College.

? Received "Green & Eco-Friendly Campus" award from Jai Safety Service for maintaining Green & Eco-Friendly Campus in T.J.S. Engineering College.

? Dr.S.Velmurugan, Professor, HOD-ECE, T.J.S. Engineering College received Best Teacher Award for Excellence in Education-2022 on 18.09.2022.

? Mrs. C.Shalini, Assistant Professor, T.J.S. Engineering College received Best Teacher Award for Excellence in Education-2022 on 18.09.2022.

? Received appreciation from Panchayat President, Kumaranpettai for Organizing One day Event at Kumaranpettai Village t Clean up the Kumaranpettai Village on 07.03.2022.

? Received appreciation from Panchayat Union Middle School Head Master, Kumaranpettai for Organizing One day General Health Awareness Programme at Panchayat Union Middle School on 08.02.2022.

? Received appreciation from Executive Officer at Andar Kuppam Murugan Temple, Andar Kuppam for Organizing Mass Tree Plantation at Andar Kuppam Temple on 06.01.2022.

? Received appreciation from Executive Officer at Andar Kuppam Murugan Temple, Andar Kuppam for Organizing One day Event Clean Temple at Andar Kuppam Temple to Clean up the Temple Campus on 05.01.2022.

? Received appreciation from Panchayat President, Kumaranpettai for Organizing One day Awareness Programme on General Health Awareness Programme at Kumaranpettai Village on 04.01.2022 and many more awards.......

File Description	Document
Upload 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: 52

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	5	8	12	10

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: 32

File Description	Document
Summary of the functional MoUs/linkage/collaboration indicating start date, end date, nature of collaboration etc.	[View Document](#)
List of year wise activities and exchange should be provided	[View Document](#)
List and Copies of documents indicating the functional MoUs/linkage/collaborations activity-wise and year-wise	[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](#)

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:

The Institution has always been committed to provide excellent physical facilities for teaching and learning. It recognizes that a good infrastructure is essential for creating a good academic environment and enabling quality education. To ensure this, the institute consistently upgrades its infrastructure anticipating future requirements. The college campus is spread across 11.02 acres in a lush green environment with a built-up area of 21115 sq. meters. The institution provides admirable infrastructural facilities for teaching and learning, which includes classrooms, laboratories, computing equipment, and more. The available physical infrastructure is optimally utilized beyond regular college hours to conduct co-curricular and extra-curricular activities, placement training classes, campus recruitments, meetings, seminars, conferences, etc.

Each classroom is equipped with a green board, podium, sufficient number of lights, and fans. The classrooms have good ventilation and an LCD projector is mounted with a Wi-Fi facility for ICT-enabled learning. The institution also has an established Communication Lab along with computers at individual department labs with the total count of more than 400 PCs.

All labs are completely equipped with the latest equipment. These labs aid the students on efficient investigation and progresses. The computing facilities of the college take special care to encourage a conclusive Teaching Learning Process. A computer-students proportion of 1:1.91 is being maintained with in the institution. The main library with an area of 407.31 Square meters with a seating capacity of 70 is maintained. The advanced library is equipped with PCs that are associated with Wi-Fi and LAN for quick and consistent access to the Web for streaming NPTEL talks and involving e-Assets to serve its users.

The institution possesses various infrastructures for teaching and learning. There are 35 classrooms available for students. Seminar Halls and 600-Student's capacity auditorium with latest audio – visual equipment's to provide the necessary support to organize effective training programmes. The auditorium is where all cultural performances, including dancing, singing, and orchestra, take place.

The institution possesses two Generators are accessible with a capacity of 125 KV A and 63 KV A in the college campus and hostel facilities respectively. Separate hostels for boys and girls, equipped with enough furniture, computing facilities, study rooms, shuttle courts, etc., are provided. Security cameras are there for safety of the students for entire campus. An adequate dining facility for the students'

breakfast, lunch, and dinner are provided. Water supply and filtration are done via reverse osmosis.

For the better physical fitness for the students benefit, all students could access to the gym and yoga room at the institute. Students can use the gym here in the morning and evening. It contains all the latest exercise equipment.

Overall, the institution has a strong commitment to providing the best infrastructure and physical facilities to facilitate quality education and academic development for its students and staff.

File Description	Document
Upload Additional information	View Document

4.1.2

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

Response: 43.66

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
39.09	4.03	11.46	160.44	214.44

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

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 institute's library is a well-furnished and spacious facility, covering a wide collection of engineering books. It includes a wide range of national and international journals, magazines, covering various subjects like Mathematics, Sciences, Engineering, Technology, Computer science, Humanities, and Management. The library offers a comfortable reading environment with a seating capacity for up to 70 students. The collection of books comprises more than 6197 titles and over 18406 volumes, including e-books, national and international journals, magazines, and newspapers. This comprehensive collection empowers students to enrich their knowledge and skills in their respective fields making the library a valuable resource for their academic and intellectual growth.

ILMS:

The library is equipped with mastersoft-LIBMAN - Integrated Library Management System (ILMS) to deliver high-quality service to readers and establish an efficient book storage system. The mastersoft-LIBMAN ILMS includes various features, such as an Online Public Access Catalog (OPAC) and allows users to locate the status and location of books, view available resources, and check their borrower status. For circulation control, users are required to present their ID cards when issuing, returning, renewing, or reserving materials.

The library's master module encompasses users, books, journals, CDs, back volumes, publisher, vendor, issue/return, and report modules. Through this comprehensive system, various reports can be generated and printed such as utilization reports, books issued and return reports, bibliography reports, and categorization based on accession number, author, subject, department, supplier, publisher, title, availability, and unique book titles. The library management system ensures efficient management and accessibility of resources for an enhanced reading experience. The version of the mastersoft-LIBMAN is 2.1.0

Access to e-Resources:

The central library at the college provides students with access to a wide array of e-resources and e-Journals through various institutional memberships, including DELNET, and IESTC. The Digital Library is connected with a high-speed of 200 Mbps in LAN with computers within the facility. Users can directly access online journals allowing them to stay updated on the latest engineering research and developments. Moreover, the library offers access to faculty publications, patents, and student publications, resulting in a comprehensive collection of scholarly resources. To further enhance the learning experience, the library provides SWAYAM, NDLI, E-ShodhSindhu and other E-Learning resources initiated by the Government of India.

Overall, the college central library serves as a valuable resource for students to enhance their knowledge and skills in their respective fields. Its extensive collection of engineering books. access to e-resources, and well-equipped facilities make it an indispensable component of the institute's academic environment.

File Description	Document
Upload 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:

The world is rapidly becoming a digital one, so SCOP is eager to provide computer education to every college student. To meet this requirement, the college has updated its IT infrastructure, guaranteeing that teaching and learning is efficient and results-oriented. All of the departments offer value-added IT training. TJS has around 316 computers in total, all of which have the newest hardware. On the campus are computer labs.

TJS maintains six switches in total, one of which is used only for the computer lab. The other five are located in the principal's room, the mechatronics lab, the boy's hostel, and the girl's hostel. Internet use is increasingly required for the exchange of information and the spread of knowledge. There is a LAN connection to make file sharing between departments easier. Twenty-five wireless access points and seven extreme switches have replaced the outdated network. In 2022, our campus will have full Wi-Fi capability. Every block has Wi-Fi enabled for convenience of access (more than 18 devices).

LCD projectors have been put in every seminar and conference room. Faculty members now have an improved biometric scanner-based attendance capturing system. Data was readily available from every department, as well as from lecture halls and classrooms. The Wi-Fi connection has a 100 Mbps speed. Wi-Fi is also connected to biometric attendance machines.

Teachers and students enjoy round-the-clock access to the internet, which makes our Wi-Fi facility stand out. Reliability, performance, and efficiency are the top priorities in the network architecture of today, both wired and wireless. Wi-Fi is available throughout the entire campus. To achieve paperless operations, efforts are undertaken to digitize the administrative procedures. Software specifically designed for digitizing student databases was deployed by the college office. All faculty members and students can access this using the updated College Web Portal. Problems with technology are resolved right away and put to use in the spread and enhancement of knowledge.

File Description	Document
Upload Additional information	[View Document](#)

4.3.2

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

Response: 1.92

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

Response: 316

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: 32.12

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
43.92	10.68	14.74	90.15	156.51

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 maintenance of infrastructure should be clearly highlighted)	[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: 77.33

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
467	420	394	594	785

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](#)
Provide Links for any other relevant document to support the claim (if any)	[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: 81.05

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
406	397	496	628	861

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 w.r.t Organisation wide awareness and undertakings on policies with zero tolerance	[View 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](#)
Annual report of the committee motioning the activities and number of grievances redressed to prove timely redressal of the grievances	[View Document](#)
Provide Links for any other relevant document to support the claim (if any)	[View Document](#)

5.2 Student Progression

5.2.1

Percentage of placement of outgoing students and students progressing to higher education during the last five years

Response: 71.2

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
83	132	135	174	225

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
108	145	215	252	332

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: 1.98

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	2	0	3	0

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**
Provide Links for any other relevant document to support the claim (if any)	**View Document**

5.3 Student Participation and Activities

5.3.1

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

Response: 32

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
13	2	0	8	9

File Description	Document
Upload supporting document	[View Document](#)
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: 35.4

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
49	46	2	39	41

File Description	Document
Upload supporting document	[View Document](#)
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:

Our Institute has a registered Alumni Association for developing strong bond between old students and present students. The students who have graduated from the college are eligible to register as members of the alumni association. Our college is arranging the Alumni meet every year. The alumni association gives support to the students in many ways. It is named as TJSECAA, i.e., T.J.S. Engineering College Alumni Association. TJSECAA was registered under Societies Act 27 of 1975. The office of TJSECAA is in the premises of T.J.S. Engineering College, TJS Nagar, Peruvoyal, Near Kavaraipettai, Gummidipoondi Taluk, Thiruvallur District -601 206. The association provides a platform for passed out students to keep in touch with the college. The mission of the Alumni Association is to contribute for the development of the institution.

The Alumni Association is an energetic and huge stakeholder excitedly supporting the establishment by speculation of both time and money. It likewise assumes a critical part in shaping and safeguarding an enduring connection between the institution and society. The alumni members take part in IQAC and they are welcome to take part in workshops/ conferences organized by the college. The affiliation puts together exercises for the advantage and improvement of the current students. The old students gives Academic Support and suggestions on quality enhancement of teaching and learning processes. Their accomplishments reflect the nature of training and values ingrained by the college.

The Alumni Association also contributes as Financial Support for growth of association by the way of donation. Financial contributions made by the Alumni Association toward the college's development further exemplify their dedication. Their fundraising efforts and financial support may play a significant role in advancing various developmental activities within the institution. Additionally, some of the alumni placed in reputed companies who refer the names of their juniors for career opportunities.

Alumnus extended their support in curricular and co-curricular activities like cultural, seminar, books donation. As they have organized many events while they studied, this experience helps the present students a lot in conducting programs. The seminars are organized by inviting alumni as resource person to deliver current technologies by departments. Distinguished alumni are invited as chief guest in college events and honored. Some of the alumni are employed as faculty members in various departments and are contributing to the growth of the institution.

The alumni of the college had to be brought together for further activities to conduct the alumni meet and the formal Alumni Association was initiated with a proper Inaugural function under the guidance of the Principal.

File Description	Document
Upload 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:

Vision

To empower the youth by developing their capabilities through quality education based on values.

Mission

- To promote education through a holistic manner to make them employable.
- To make them responsible citizens to participate in the advancement of the society.
- To make them contribute to the national growth and the world at large.
- To promote excellence, quality and relevance in the field of technology to suit the industry needs.

Governance of the institution

Our institution management have a convergence approach with Principal and Faculty to approve the mission and vision of the college. Principal along with Teaching and Non-Teaching staff implement guidelines of the management.

Internal quality assurance cell sets plan from the stake holders' feedback and presents it to Development committee. It is then forwarded by Principal to management board for approval.

Co-ordinators from various committees that include academic and non-academic give their suggestion and Institution policy is streamlined, so that our institution vision and mission is achieved.

Academic Activities

Academic calendar is discussed in a board of meeting that includes Principal, Head of the Department, Faculty members and a Student leader. It is well planned such that, it not only includes the curriculum subjects. It also contain, planned date for conference, workshop, seminar, guest lecture, FDP, industrial visit, internship training, sports activities, placement, club activities, symposium and functions. Co-ordinators for various activities lead the program and make it success.

Parent-Teacher-Student Relationship:

Faculties contact students' parent regularly and have an interaction regarding performance and collect feedback about the institution. The feedback is given to the Head of the department to analyse and take

proper action for the growth of the student welfare.

The mentoring process is also carried out by every staff to confirm that students attain an excellent academic environment and also grow up with professional ethics.

Infrastructure Development:

Director, Principal and administrative staff often conduct a meeting to review the facilities that are provided in the campus and would discuss complaints if they have any and would take necessary action and satisfy the needs.

The college reviews the infrastructure in campus for modernisation to provide a transparent work culture.

In TJSEC library, department laboratories, E-Learning Resources are also provided to students to enrich themselves with recent trends and technologies that can change themselves and adopt to present engineering world.

File Description	Document
Upload 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:

T.J.S. Engineering College was started by T.J. Sivananda Mudaliar Educational Trust in the year 2009 and offers UG and PG programmes in Engineering stream. The college is approved by AICTE and accredited by the NAAC. It is an ISO 9001:2015-certified institution. The college's mission is to provide students with a high-quality education by utilizing industry-relevant teaching and training techniques.

HR POLICY

It gives the details about the recruitment processes, roles and responsibilities of the governing council members, staff promotion guidelines, etc., The governing council monitors the overall performance of the college.

ORGANIZATIONAL STRUCTURE

The organizational structure of the institution indicates that the organization is supported by the Board of Trustees, the Governing Council and the Academic Council. The governing council consists of the Chairman, Secretary, Vice Chairman, Managing Directors, the Principal, and the Faculty Members of the institution. The academic council oversees the policies and procedures regarding academic matters with the Principal, HoDs and Senior Faculties of the college, Experts from leading institutions, industry representatives, and university nominees as members.

DECENTRALIZED COMMITTEES

The following committees are formed in the college for the smooth functioning of the institutions. The committees, cells and clubs are headed by the Principal.

Planning and Monitoring Committee, Academic Committee, Discipline and Welfare Committee, Grievance Redressal Committee, Anti-Drug Committee, Anti-Ragging Committee, Committee For SC/ST, Internal Complaint Committee, Internal Quality Assurance Cell and Fine Arts Committee.

ACADEMIC CALENDAR

Every academic year begins with the careful planning and preparation of the academic calendar. The timetable is prepared based on the Anna University schedule which will be approved by the Academic Council.

SERVICE RULES, APPOINTMENT AND PROCEDURES

For the purpose of appointment of staff, the college has a clear human resources policy. The faculty members are encouraged to publish research publications and give presentations at national and international conferences and seminars. The college provides the seed money to research.

DEPLOYMENT OF INSTITUTIONAL STRATEGIC / PERSPECTIVE / DEVELOPMENT PLAN

T.J.S. Engineering college is very much devoted to providing value-based education to the students to make them qualified engineers, capable technologists and successful management professionals. This is being carried out by the continuous improvement process. The institute has a keen vision for development. The Aspects considered for inclusion in the plan are given below.

- Getting accredited by NBA & NACC.
- Establishing institute- industries interactions.
- Striving to become an institution with potential for excellence.
- Encouraging faculty to involved in R&D activities.

MEMORANDUM OF UNDERSTANDING (MOU)

The MoUs aim to promote and help TJSEC in steering towards outcome-based education, which will in turn steer the process of high-quality education.

ICT – ENABLED / SMART CLASS ROOM

A smart classroom offers superior opportunities for the teaching and learning process. This increases the excitement and quick understanding of learning. Our college offers ICT- enabled smart classes that help the students to grasp the concepts more clearly.

File Description	Document
Upload Additional information	[View Document](#)
Institutional perspective Plan and deployment documents on the website	[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:

Staff welfare refers to all aspects of a workplace environment that support the well-being of its staff. It also encompasses staff benefits such as health insurance, vacation leave, free transport and other support services. It creates flexible working arrangements and offers appropriate benefits, it makes sure that staff members are safe in the workplace. Staff Welfare programs can help promote physical and mental health among employees. In order to improve the qualification, update their knowledge/skill sets faculty members are given academic leave or special leave to attend FDPS, Workshops/Seminars/Conferences/Industrial training programs organized by premier institutions. Registration fee/ travel grant is paid by the institute to the faculty to attend these programs. Free transport is provided to all the teaching and non-teaching staff. Employee Provident Fund (EPF) scheme is implemented for teaching staffs. Majority of eligible staff members have availed the benefit of these schemes.

All recently joined employees are motivated and encouraged to fulfil their roles to the highest standards of excellence. Ensuring a continuous and high-quality orientation equips new staff to adjust to the demands of their role quickly and perform tasks with distinction. TJSEC management is committed to provide a work environment free from all kind of intimidation or offences which might interfere with an individual's dignity or work performance. In addition the following are the welfare Measures that exist for teaching and non-teaching staff of TJSEC Medical claim (Accidents) for staff and students, School Fee concession to children of TJSEC staff/employees, Festival Gifts and Advance, No objection certificate, Festival advance. Employees of TJSEC are eligible to avail Casual Leave, General Leave, Maternity Leave, Compensation Leave, Medical leave, Vacation Leave, Permissions.

The analysis of an employee's recent successes and failures, personal strengths and challenges, and suitability for promotion or further improvement is known as performance appraisal.

Staff performance is carried out every year as per the following criteria

1. Teaching Learning and Evaluation

2. Research Innovation and Extension

3. Professional Responsibility

Academic qualifications, teaching experience, feedback from students , research experience and training, research projects and consultancy, attendance at Seminars/Conferences/Symposia/Workshops, number of publications/products/patents, and communication skills, Institutional development and academic leadership, Innovative teaching and learning methodology are used to evaluate teaching staff performance. The performance of faculty and staff members is evaluated on a regular basis. Through the use of an updated well-organized design, students evaluate the instructors handling their specific courses, twice a semester. Covering various aspects of student educator interaction. It has a significant effect on student learning and has been described as the most powerful moderator that boosts learning. Salary and other benefits are increased or promoted based on the individual's performance.

File Description	Document
Upload 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: 57.56

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
49	53	48	51	77

File Description	Document
Policy document on providing financial support to teachers	[View Document](#)
Institutional data in the prescribed format	[View Document](#)
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](#)
Provide Links for any other relevant document to support the claim (if any)	[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: 72.63

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
82	107	94	101	91

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
29	34	33	36	39

File Description	Document
Refresher course/Faculty Orientation or other programmes as per UGC/AICTE stipulated periods, as participated by teachers year-wise.	[View 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](#)
Provide Links for any other relevant document to support the claim (if any)	[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:

T.J.S. Engineering College started by T.J. Sivananda Mudaliar Educational Trust, in the year 2009 is devoted to serve the needs of the under privileged students. It aims to mould the young minds and their skills to succeed in Engineering Education. The utilization of financial resources is properly planned at the beginning of every academic year and the fund is efficiently used throughout the year. The centralized accounting device records and updates each transaction, and the budgeting system is utilized to allocate and use financial resources perfectly.

The primary source of income is the collection of fees. The fees collected from students are used for

many academic development activities such as faculty salary for teaching and non-teaching, academic maintenance, physical maintenance and improvement of the infrastructure of the College. The fee collected from hostel students are used for operations and maintenance of Hostel.

The college conducts external and internal audits for both Government and non-government funds regularly. Auditors appointed by the management for internal and external audits bring out accurate and complete disclosure of the financial results.

Every department is expected to submit the budget based on their requirement such as updating software, purchasing of computers and new equipment for laboratory, purchasing of consumables and for the maintenance of the laboratory for the academic year. The management approves the consolidated report. Based on the sanctioned budget, funds are released to the departments. Every financial transaction is recorded and updated.

Internal Audit is executed every year by the internal auditing team appointed by the management to find out whether the management policies and guidelines for accounting are accurately implemented. They verify bills, vouchers, receipts, cash books, asset registers etc. Complaints if any are need to be rectified within the specified time.

External Audit is conducted every year and analyses all the registers and accounts of the college. The audit objections are corrected by the accounts department and a report with explanation is submitted to the Committee. The Action Taken Report is also sent to the auditor for final approval.

File Description	Document
Upload 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 (IQAC) was established in the academic year 2019, adopting a Quality Policy aimed at developing quality assurance strategies for the benefit of all stakeholders. The primary goal of IQAC is to devise methods to enhance the academic and administrative functions of the institution.

The college has a Planning and Monitoring Committee (PMC) to address the concerns and viewpoints on academic matters. The PMC's objectives include improving management skills by delegating roles and responsibilities to faculty and students, participating in decision-making, and planning student-centered

approaches. It also aims to promote strong relationships among students, administrators, and management. The PMC is crucial in improving the academic experience and campus life for students. IQAC evaluates the delivery content, course execution, and teaching-learning processes through feedback and conducts academic audits. It gathers feedback from students, teachers, alumni, parents, and employers. The college processes and implements corrective actions. Suggestions are carefully considered in future planning for improvement.

IQAC has played a key role in achieving ISO, and NAAC certifications. Green Energy Audits are conducted to evaluate the eco-friendly measures implemented on campus and to promote a sustainable environment. To enhance teaching quality, IQAC organizes seminars, conferences, faculty development programs, workshops, and hands-on training in partnership with academic institutions to foster knowledge creation and dissemination among faculty members.

To ensure high-quality academic performance, the (IQAC) has implemented the Academic and Administrative Audit (AAA) system. At the end of each academic year, an audit is conducted for all departments by a team consisting of a chairperson, convener, external members, and internal members. The team evaluates various parameters and procedures based on modern educational standards. After the audit is completed, the team submits a final report to the principal

Staff Performance Appraisal is conducted to assess teachers' progress in teaching-learning, research, innovation, extension, and professional responsibilities. The appraisal identifies each individual's strengths and areas for improvement.

File Description	Document
Upload 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:

TJSEC treats both the genders equally in terms of admissions, training, and placement, co-curricular and extra-curricular activities.

The institution has introduced several measures in gender equity and sensitization. There are committees headed by the senior faculty members to inculcate these values among the students.

The college ensures the safety and security of women and provides the CCTV surveillance for college campus and the hostel with the permanent security staff. The Women's Cell motivates the girl students to participate in programmes and competitions in and outside the college to make them capable and well-organized. Important emergency helpline numbers are displayed around the campus for easy access

Care and safety procedures are followed throughout Industrial Visits, International Conferences, Inter Collegiate Seminars, Tours and Field Trips by the female staff accompanying the girl students.

Active counselling is ensured through class teachers and mentors. The Counselling Cell of the college regularly conducts meeting and strives to resolve issues regarding sexual harassment or gender conflict and render psychological support. Women's Cell focuses on the academic and emotional integrity of every girl student through the continuous monitoring by a mentor assigned to them.

The Grievance Redressal Committee has been frequently organizing various events to uplift women and promote the importance of gender equality in the college. The committee is committed to the security of female employees and students, addressing their complaints. The committee also plays a vital role in monitoring and preventing sexual harassment. Motivational programs are frequently conducted to improve self-confidence.

TJSEC provides separate common rooms and separate hostels for Boys and Girls. Wash rooms are accessible on every floor. In addition, the management has installed a sanitary pad dispenser and an incinerator in order to serve the unique needs of the girl students.

Resting rooms or Sickrooms are available with vital facilities such as first aid boxes, wheel chairs and beds to ensure students'comfort. Students, who fall sick, are immediately taken to the college vehicle for further medical attention, in case of emergencies. The students are given complete care until they get back to normalcy.

Along with curricular programs, college arranges several extracurricular programs, seminars, discussions, workshops on gender issues throughout the year to create awareness over gender equality and efforts to change the society towards it.

File Description	Document
Upload 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.	[View Document](#)
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	[View Document](#)
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	[View Document](#)
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 students and employees to the constitutional obligations: values, rights, duties and responsibilities of citizens (Within 500 words)

Response:

The Institute has taken many initiatives to make sure that the campus provides an inclusive environment. The institution also admitted students from neighbouring states, and from various religions, socio-economic and cultural backgrounds.

To maintain cultural diversity every year Pongal celebrations are held in the campus. Students take part in the celebration like the preparation of Pongal, Tamil traditional games (Uriyadithal), cultural activities, etc.,

Ayutha Pooja is celebrated with great fervour. The entire college celebrated the Ayudha Pooja festival for all equipment, Vehicles, Laboratories, etc., Finally, sweets were distributed to the students, teaching and non-teaching staff members.

International Women's Day is celebrated every year in our campus. Every year, a unique theme of honouring the contribution of women in all aspects of life is observed on this day. This day makes the world more inclusive and emphasizes the value of gender equality.

The "World Environment Day" is celebrated every year to raise global awareness and to protect our planet Earth.

TJSEC-NSS Unit organized a General Health Check-up program in M.K.V Boys Higher Secondary School, Arani. The common people along with the staff and students of TJSEC were benefitted through this drive.

TJSEC-NSS Unit organized a "Road Safety Awareness Programme" with the help of Traffic Police Department. Students distributed posters to various people and created awareness among the public.

TJSEC conducted First Aid Training Program in association with "Save a Life" a renowned organization to disseminate First Aid knowledge and skills. The attendees of this program have understood the importance of First-Aid training.

TJSEC organised a programme on "Traffic Assistance with Traffic Police for Public" in association with RTO, Gummidipoondi at Kavaraipettai Bazzar. Students were enlightened on speed limits, traffic violations etc., from the traffic assistance.

Voter's awareness programme was conducted in our campus to educate every one about the rights and duties of citizens. For creating voters' awareness to the society, we have organized rally from Gummidipoondi in order to create awareness on importance of casting the votes.

File Description	Document
Upload 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:

Title of the Practice: Skill Enhancement training

Objective:

- To enhance career skill sets of students.
- To make them competent and employable in multinational industries.
- To make the students understand the expectations of employers in the recruitment process through proper training.

The Context

TJSEC believes that academic education forms the foundation of a student's learning journey and skills enhancement is equally important in exposing their full potential. Students can bridge the gap between theory and practice, by actively participating in skill-building activities, enhance their employability, foster personal growth, adapt to changing circumstances and build professional networks. The skill enhancement training is designed by the placement cell of TJSEC to enhance the student's *ability and knowledge. The above average students who have exceptional ability to learn beyond are identified as advanced learners. Those students are initiated to participate in order to explore the ways and mould*

certain traits so that they can cultivate career development. *The training contributes* a comprehensive growth, employability, limberness, entrepreneurial ability, problem-solving abilities, self-confidence, life skills and academic success. *Embracing skills development during studies empowers our advanced learners to become well-rounded individuals, ready to prosper in the competitive and fast evolving world beyond graduation.*

The Practice:

 Institution offers career development programs to the advanced learners in order to place them with higher packages and make them known to the prospective employers according to their aspirations and background. It creates awareness to the young minds by serving them with the proper guidance; infrastructure, opportunities, and encouragement that help them to fulfill their ambitions. The Training programs are composed after a thorough analysis of the current requirements from the corporate sectors and then initiated to the students. A trainer has been appointed by the Institution in order to train the students in the areas like Presentation Skills, Interpersonal Skills, Personal Grooming, Logical Reasoning, Inference, Verbal Reasoning, Situational Conversation, Team Building, Group Discussion, Planning and Goal Setting. Proper course modules are created in order to impart the training which enables the students to gain a competitive edge in the recruitment process, groom their confidence and develop their personality.

Evidence of Success

TJSEC observed a growth in the placement of the students after application of various tools and initiatives. The same is highlighted in the figure below.

- 75% of qualified students are placed successfully.
- Improved maximum and average salary package for students.
- Ensuring students getting placement opportunities after their graduation.
- Rise in number of companies visited for campus placement.
- Reached quality placement of interested students.

Problems encountered

- Students must be highly focused to attend the courses related to enhancement training.
- Students required more E-Resources, Books and E-Journals for better learning and research.
- Students required more advanced experimental based learning which will highly enhance towards their caliber in their specialization.
- Students would be happy if more focus is given to them to attend development programs.

<div align="center">*****************</div>

BEST PRACTICE –II

Title of the Practice: Remedial measures for slow learners

Objective

- To overcome challenges in accomplishing academic success.
- To foster an optimistic and comprehensive learning environment.
- To enhance Academic Performance of the slow learners.

The Context:

TJSEC is committed to improve the academic performance of the enrolled students, thus, it makes due efforts to augment the academic performance of slow learners. A classroom is a combination of learning competencies and interests. The learning interest and pace of every student is different. They have different showcase to expose their talents. Some students have advanced ability to perform whereas some students will not be able to keep up with other students. It is the sole responsibility of the teacher to identify those students and have compassion and empathy towards those students and identify the deficiencies. In this regard, the institution adopts the remedial measures as one of the techniques which is applied to eliminate the slow learner's weakness or deficiencies. The use of varied teaching approaches by the institution assist the weak students to improve their performance. These remedial measures will help to bridge the gap in student learning and provide an opportunity to feel free to clear their doubts.

The Practice:

TJSEC supports the slow learners on emotional and academic ground through the structured mechanism to overcome the academic gap. The slow learners are identified on the basis of their performance in previous examinations, continuous monitoring and their willingness to learning in the classroom.

After the identification of the slow learners, every department prepares a timetable accordingly. The students and the faculty members are informed about the schedule and details of remedial classes. The slow learners are given additional study material and encouraged to solve previous examination papers of university. The faculty members remain in regular contact with slow learners. Specific steps such as concept clarification, bilingual explanations, discussions, problem solving activities, slip tests, first hour Tests and last hour Tests are followed in every department. This methodology helps the slow learners in their academic endeavors and overcome their difficulties in scoring good marks in their examination.

Evidence of Success

- The performance of the students is enhanced in the internal assessment and end semester university exams.
- It reduced the burden of preparation at the time of exams.
- The students' interaction in the classroom is increased.
- The continuous learning practice is improved.
- Students gain self-confidence to appear for any competitive exam.

Problems encountered:

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- The slow learners struggled to concentrate for long time.
- They struggled to remember the lessons.
- They struggled to grasp the concepts due to the language barrier.
- Anna University prescribed Span for every semester is short to cover the syllabus

File Description	Document
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:

TJS Engineering College stands majestic over an area of 11.2 acres in Kavarapettei near Chennai (NH5). It was established in the year 2009, by a unit of T.J. Sivananda Mudaliar Educational Trust, with a passion to serve the young minds, a quality education, with a fine blend of traditional values, modern facilities and professional ethics.

One of the distinctive traits of the institute is the support, it renders to the slow learners, who are particularly from rural areas to access the progressive ambitions in the path of Engineering.

Our institution practices the method of identifying and screening the students when they are in higher secondary level. They are categorized into slow learners and advanced learners. Our faculty members provide guidance to those students according to their special requirements. An instructional strategy is designed as per the specific requirement of the identified students through our Programmes.

The significant aspect of our college is in providing a holistic teacher training program particularly those who are not aware of updated practices and methodologies in education. Many programs have been conducted to such teachers to learn new methods and techniques which they can implement in the classroom to better educate their students.

The institute is focusing continuously and consistently on the following activities for the accomplishment of institute's vision.

Student Progression Facilities

Students are motivated to work out innovative plans, maintain academic culture, organize social events and activities in a number of ways such as seminars, conferences, sports and cultural programmes. Students are encouraged to improve their presentation in examinations, co-curricular and extracurricular activities, through rewards such as trophies, prizes, certificates and scholarships. The institute patronizes

different clubs to encourage students so that the students will showcase their talents. The Psychological Counselling Cell, NSS, EDC, Placement and Career Guidance Cell help in maintaining and improving quality.

Induction Programme

The strength of our relationship with the students is our ability to measure their strengths and weaknesses. An 'Orientation Programme' was organized to welcome the first-year students. The aim of the program was to give the students who are joining the college a bird's eye view about various scopes of engineering and the career prospects for the engineering students and to familiarize them with the systems and procedures of the college. The purpose was to make the students to become successful engineers.

Faculty Development Programme for Teachers

Faculty development programmes have been organized to orient and train our faculty in the latest ICT based teaching learning methods. Capability development programmes for faculty and workshops on excellence in Higher Education and Semester System have been organized. Soft skills development programmes to boost a positive attitude towards the profession have also been organized for our faculty members.

Our college successfully organized more than 10 development programmes for school teachers on various topics such as **"How to accelerate our reflexes and critical thinking to become extraordinary in teaching" "Skills to integrate creative process in classroom" "Best practices for a creative classroom"** These programmes enlightened more than 500 school teachers. The positive feedback received from the participants motivates our college to conduct more programmes in the years to come. Resource persons who possess rich experience and excellent knowledge from well reputed organizations are invited in making every FDP an eye- opening experience.

Career Development Programme

Our faculty members guide the students of higher secondary in academics, education planning and achieving their own career goals. We have reached more than 150 schools in and around Chennai and Tiruvallur districts. We are successful and have enlightened 15000 students with an aim of empowering them to choose a meaningful career and education pathway through our motivational Career Development Programmes.

Science Project Expo

Our college conducts Science Project Expo with an aim to encourage the higher secondary students to come up with unique science-related discoveries or experiments and awards worthy cash prizes and certificates to promote their interest in science and technology.

Communication Development Programme

The need for the students of engineering to be trained in a communication skill is high. The demand for brilliant engineers is high in MNCs. The training and Placement Cell of TJSEC train the students to understand the importance of speaking effectively in public and its impact on the career and profession.

Communication development programmes conducted by the placement team help the students well to get placed in reputed companies.

Life Skill Education

Life skill education is a developmental tool to empower the students and to safeguard their future by providing them overall development in today's world. Motivational Programmes on Life skills offered in TJSEC prepare young engineers to face the theoretical and practical world with confidence.

Inter and Intra personal skills

The Training and Placement team of TJSEC conducts soft skills programmes for the students to understand the difference between interpersonal and intrapersonal aptitude to have a successful and satisfying life. Our students gained the ability to build connections with others to navigate themselves in an appropriate manner through these programmes.

Self-Development

We are passionate about educating confidence, assertiveness and self-assurance in our students to support in their personal journey of self-development. Our students gain confidence and self- assurance through self-development workshop. Students are able to interact and communicate with each other. The workshop facilitates the students for better teamwork and personal relationships.

Yoga and Meditation

The students of TJSEC are expected to be balanced in all aspects – body, mind and soul. Our students are taught values and skills. Yoga and meditation is part of the student's Physical Education program. We are very much aware of the fact that Yoga and meditation will help the students to gain positive results which is profitable for them in the long run.

Improving mental health through yoga and meditation, guiding during tough times, and supporting overall well-being throughout the course are the ways our college care for our students.

File Description	Document
Appropriate web in the Institutional website	[View Document](#)

5. CONCLUSION

Additional Information :

The institution is situated in a rural area where we have more number of under privileged people. The students who come from this background are taught and motivated to the level that they get university ranks. We have secured many university ranks from inception of college.

To help the needy and to motivate the efforts of the students, scholarships are provided by the college management.

To make the first-year students understand the basic principle and concept of the Engineering subjects, Basic Science Workshops like Robotics, Water Rocket, Basic Laws of Science, and Basics of Mechanical Engineering are regularly conducted.

Final year students are encouraged to undertake their own projects in their final semester. The students are advised to do real-time projects as well as to publish their research works in journals.

The students have exposed their talents and skills in various inter collegiate level competitions. Our students got selected in the virtual round in SAE E-Baja competition which was held in Punjab.

Learning never ends and it is true with some of our students who pursue their P.G. and doctorate degrees in renowned institutions of our country and abroad. Certain number of students positively cleared Civil Service Examinations like TNPSC.

The college strives to create good professionals and it is also keen on producing self-made Entrepreneurs through Entrepreneurship Training Programme which enhances their skills to execute their business.

The college has been experiencing a constant growth since its inception. Based on the result of the last four semesters, our college has got more than 90% of university result which comes under the control of Anna University.

Concluding Remarks :

Student Centric Classroom Teaching Method is the most powerful method for effective learning. Thus, the institution is adapts this method to make students get involved in classroom teaching- learning activities.

Besides theories, practical classes are also given equal importance. The concept and the application of the experiment are well explained at the beginning of every practical class as it gives them a complete knowledge of every topic and it also enables them to carry out Projects.

The students are encouraged to do quality concerned projects to empower themselves in research and innovation field. We encourage the students to undergo Internships and In-plant Trainings to get acquainted with the workplace environment and also to gain firsthand experience. It is mandatory for the students of our Institution to undergo at least one In-plant Training in a semester. All the final year students are guided to do real-time Quality Concerned Projects to the extent that the outcome of the works are presented as papers and

get published in journals.

Students are given Placement Training right from their second year to ensure that they get placed in reputed companies once their course gets completed.

Faculty members are encouraged to learn new technologies by regularly updating themselves. To kindle the research attitude in them, they are advised to attend seminars, workshops, and symposia. It is essential for the staff our college to get involved in FDPs which would enable them to update their research and pedagogical skills.

Our College renews its commitment to uphold and sustain excellence in education and ensures justice and equality in all aspects of its educational mission.

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