

# FOR

# **1st CYCLE OF ACCREDITATION**

# JAYA SAKTHI ENGINEERING COLLEGE

JAYA SAKTHI ENGINEERING COLLEGE, ST.MARS NAGAR, NEAR AVADI, THIRUNINRAVUR, CHENNAI 602024 www.sakthiec.edu.in

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Submitted To

# NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL

# BANGALORE

# March 2023

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

# INTRODUCTION

The College is approved by All India Council for Technical Education (A.I.C.T.E) and Affiliated to the Anna University, Chennai. It can be proudly stated that many Engineers pass out every year from various branches from the college it is a self financing institution which brings out well qualified, talented engineers.

We impart skills in a harmonious, pluralistic environment preparing students to meet challenges and embrace opportunities of the increasingly global world.

Situated close to Chennai Metropolis, the College is one of the foremost centers of graduate and professional education in the state of Tamil Nadu. The range and depth of resources at the college have few peers. Within easy reach on the same campus and other sites, the college combines all the advantages of a comprehensive institution in the Arts and Science with a full complement of professional schools. Among these are business, dentistry and an unusually complete array of paramedical professions, including pharmacy and physiotherapy.

# Vision

• To achieve Technical Education Excellence through Innovative Teaching, Research and Entrepreneurship who create wealth for our nation and develop a fulfilling global societ.

# Mission

- To create a state of art educational institution contributing to innovationentrepreneurship, engineering and technology for our country.
- To Provide Quality Education, Self discipline and Ethical values.
- To identify student's skills and encourage them through creative and enriching methodologies and share their knowledge to create newsociety.

# Strength, Weakness, Opportunity and Challenges(SWOC)

## Institutional Strength

- The institution was built with good foundation and well equipped labs
- Faculty Retention rate is very high.
- ICT enabled Teaching–Learning process
- Skill development programmes offered to students from first year onwards
- Student participation in Academic and Administrative activities Career improvement of students through Co curricular and Extra-curricular activities
- Satisfying the diverse needs of students with different backgrounds
- Appropriate feedback mechanism for continuous quality improvement
- Good rapport among the stakeholders

• Eco - friendly practices in the campus

#### **Institutional Weakness**

- Geographically located in rural region
- Less industrial connectivity due to remote location
- Gap between the curriculum and needs of the industry to be improved.
- Departments need to become recognized Research Centers by Anna University

## **Institutional Opportunity**

- Establishing Centre of Excellence in key areas like research and consultancy
- Offering courses through NPTEL influences the self-learning initiative of students Value added courses provide opportunities to explore new areas of interest
- Establishing continuous interaction with industry for mutual growth Emphasis on renewable energy sources and use of power saving appliances

More placements through our alumni

## Institutional Challenge

Changing admission scenario in engineering programmes due to more number of colleges in and around.

Rapid changes in technology and accordingly improving the employability skills of students Lack of free slots in academic schedule confines incorporating more add-on courses to cope up with industry requirements

Availability of qualified faculty in the emerging areas of technology Reduced reading habits of students due to the influence of media

# **CRITERIA WISE SUMMARY**

## **Curricular Aspects**

Jaya Sakthi Engineering College is a affiliated Institution under Anna University, Chennai Tamilnadu. 5 under graduate programmes are offered as per the regulations and curriculum & syllabi of Anna University, Chennai.

The Institution follows the syllabus and scheme prescribed by the University. The Institution takes utmost effort in effective curricular planning and implementation as prescribed by our affiliating university. Each course follows the Choice Based Credit System (CBCS) and the syllabus framed by Syllabus committee, Board of Studies of Anna University, Chennai. Compliance of Anna university curriculum is done to contribute different domains in curriculum and curricular gaps are identified through inputs from stakeholders.

Academic calendar is diligently prepared to implement the curriculum effectively. Institute adheres strictly to the Academic Calendar prepared in the beginning of each semester as per the academic schedule provided by the Anna University which includes weekly working days, holidays, internal assessment test dates, practical exam dates, Department wise workshops schedule, technical seminars, industrial visit, parent teachers meeting, sports day, cultural day, last working day etc. Internal Tests and Model Exams are conducted as per the schedule.

Based on the feedback on syllabus from different stakeholders, Institute offers certificate courses to the students every year to cater to the requirements of the stakeholders and the job market. Teachers of the Institution are also participating in design and development of curriculum and evaluation process. Courses relevant to Gender, Environment like Environmental Science, Professional Ethics, Human Rights, etc. are offered as per Anna University curriculum. Awareness programmes on gender empowerment, environmental protection and service camps are conducted to groom the youngsters as better citizens.

Guest lectures, in plant training, Internship and Value added courses are executed to motivate the students to do innovative projects. Analytical and aptitude training classes are conducted to ensure better placement. Student's knowledge is enriched through experiential learning, field work, internship, project work. Feedback of the curriculum is collected from various stakeholders like Students, Faculty, Employers, Parents and Alumni of the institution. Further the feedback has been analyzed and action has been taken.

# **Teaching-learning and Evaluation**

Our Institution offers quality technical education by best teaching techniques with an exalted aim of bringing students especially from the rural areas into the fields of Engineering. JSEC is approved by AICTE and permanent affiliated to Anna University, Chennai.

The institution has a student-faculty ratio of 7.56: 1 for effective teaching.

Each semester academic calendar was prepared in aligned with University. Advanced and slow learners are

#### Self Study Report of JAYA SAKTHI ENGINEERING COLLEGE

identified based on learning abilities, and special programs are arranged to enhance their performance. For slow learners Remedial Classes, bilingual explanation and discussions were conducted after the class hours for better understanding. Internal tests and end semester examination is conducted for continuous assessment. Blooms taxonomy is followed in the question papers. The process is transparent and adheres strictly to the academic calendar. Class Committee meetings were conducted thrice in a semester. The committee will discuss the syllabus completion and collect feedback from the students. The average pass percentage of students during last five years is 68.50 %. Faculties were allotted as mentor with the average of 8 students for academic counseling & other related issues. Average percentage of full-time teachers against sanctioned posts is 100.00.

Student centric methods are adopted for enhancing learning experiences. Our institution promotes ICT teaching methodologies through E-Learning resources such as Video Lectures, NPTEL Courses, Virtual Lab, Smart Class rooms, E-Books and E-Journals. Course Outcomes (COs) are defined for all subjects and mapped with Program outcomes (POs) and Program Specific outcomes (PSOs). Attainment levels of COs, POs and PSOs are calculated and evaluated. The student feedback mechanism facilitates to identify the strength and areas for continuous improvement in teaching learning process.

#### **Research, Innovations and Extension**

The institute has developed a research and development cell with futuristic policies in order to develop research attitude towards students and faculties. Although it is in the beginning stage we have conducted lots of workshops and seminars to enable the students in recent trends of the research, entrepreneurship development, along with that our faculties also presented their paper in international and national conferences. Furthermore, our faculty members published their research work in peer reviewed national and international journal indexed in UGC care, SCOPUS and Web of Science. We also start to get research grants and applied for various research project to government and non-government agencies and industries

Faculty members are motivated to apply for research projects are funded by Government and Non-Government agencies The Institution has Entrepreneurship Development Cell (EDC) and Industry Incubation Centre to identify young talents and nurture them in research Number of workshops / seminars conducted on Intellectual Property Rights and Industry-Academia Innovative Practices .Knowledge Resource centre is established in our college.

Extension activities are regularly conducted by NSS, YRC, RRC and professionals to sensitize students to social issues and concerns.

To extend our students field exposure we have collaborated with the industries and companies for their training and internship. We have also signed MOU's with some industries and companies to enable the knowledge sharing and resource sharing.

#### Infrastructure and Learning Resources

The College area of 10.74 acers is located in a easily reachable place through road and rails just within 1 kM. from both. The eco-friendly infrastructure with constructed area of 15710 Sq. Mt. in a conducive environment attracts students' fraternity from and around a large area. It has well-equipped 20 classrooms with adequate ventilation, 5 seminar halls and 5 class rooms with ICT facilities and a spacious auditorium. The college has rooms made available for students with disadvantages. Ramps and Wheel Chairs are also available for them.

The other required amenities like Placement Cell, career guidance cell, Women's Empowerment cell, Indoor games facility, Yoga and Meditation Room, Sick Room, CCTV cameras, Hostel, Adequate parking facility, Public Announcement System, Generator with 125 KVA, Fire Extinguishers and RO plant for drinking water are at the service to the students.

The College has a spacious multi-purpose playground for outdoor games which include, Cricket Pitch, Football Field, Basket Ball, Volleyball Court, Throw Ball Court, Kabaddi Courts, Ball Badminton and Kho-Kho Field. The college has indoor games facilities such as Carom and Chess with an Exclusive indoor game Hall. A well-equipped gymnasium is maintained, Auditoriums is used for cultural activities for the students.

The college has a library spreading over 7210 sq.ft. The college has automated ILMS Software provided by Win LMS Version 16.0 for serving to the requirements of the library needs of the students. The Software provides ease in lending and return of books and also the additional facility of reserving a book by students in case if it not available when they search it through the software. The books are bar code marked to provide easy identification and faster processing. The students ID card is also Bar code attached for automating student's identification and speeding library processes. The Library has in total 10 machines for the ILMS software operations and Students access to digital materials. The Library provides access to students to E-Journals through DELNET subscription, J-gate and access to NDL free e journals collection through club membership and provided the link for Open Access E-Journals, E-Books and E-Thesis.

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

The highlights of this Criterion five are the efforts of an institution to provide necessary assistance to students, to enable them to acquire meaningful experiences for learning at the campus and to facilitate their holistic

#### Self Study Report of JAYA SAKTHI ENGINEERING COLLEGE

development and progression. It also looks into student performance and alumni profiles and the progression of students to higher education and gainful employment.

Students benefited through scholarships, free ships and needy students with learning difficulties should be identified by HEIs. Provision is made for bridge and value added courses in relevant areas. Facilitating mechanisms like SC/ST cell, OBC cell grievance redressal cell and welfare measures to support students.

The institution promotes value- based education for inculcating social responsibility and good citizenry amongst its student community. The institution promotes active participation of the students in social and cultural activities. Encouraging students participation in activities facilitates developing various skills and competencies and foster holistic development.

The Alumni are a strong support to the institution. An active Alumni Association can contribute in academic matters, student support as well as mobilization of resources – both financial and non financial.

#### Governance, Leadership and Management

JSEC's governance, leadership, and management strive to translate the Institution's vision into reality through the following means: The Governing Council (GC) of the Institution meets once in a year to discuss and arrive to a consensus on the administrative and academic functions of the college.

The Principal heads the academic and administrative setup. HoDs support in various academic activities as well as administration. Various committees headed by senior faculty members are formed by the Principal. These committees help in the decentralization of work and ensure collective responsibility among faculty members. All staff members have freedom to express their views and their innovative ideas. The HoDs prepare the Annual Budget of respective departments and forward to the management for approval through the Principal. The college provides advanced teaching facilities and excellent placement. The Grievance Redressal Committee looks into the grievances of both the students and staff, conducts an enquiry and addresses the grievances amicably and professionally.

More number of teachers provided with financial support to attend conferences/workshops and membership fee of professional bodies. Total number of professional development programs organized by the Institution is 62and Average percentage of teachers attended is 70 %. Welfare measures provided to the teaching and nonteaching staff include free accommodation for outstation faculty members in hostels, educational support to children of non-teaching staff members, EPF, gratuity, maternity leave benefits, insurance benefits, free transportation and food, awards, and incentives, gift for staff marriage, Medical facilities on campus and day care facility, A well-defined system for faculty appraisal is followed in the Institution. External and internal financial audits are conducted periodically and improvement strategies are developed based on the audit report. A quality assurance cell has been instituted right from the inception of the college and an IQAC has now been established for reviewing the outcomes in various activities.

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

JSEC upholds a set of values and best practices, which show the Institution's commitment towards the development of not only the students and the teachers but also the society and nation. The Institution believes in providing fair treatment to both men and women, with gender-neutrality and there is no discrimination against women, race, caste, creed and religion. The college undertakes a lot of initiatives for gender equity & sensitization like, professional counseling, common rooms, day care, transportation, hostel, facilities, etc.

The Institution organizes national and international commemorative days, events and festivals. Institution organizes gender-equity promotion programs like seminar on life skills, self defense program, yoga sessions, sexual harassment and legal provisions, women health, cancer awareness, stress management, hidden secret camera, etc. The Institution is keen in providing safety & security for girl students and women employees by installing CCTV camera. The top administrative positions are also held by women in the Institution. The Institution has invested in green initiatives such as Rain Water Harvesting, Reverse Osmosis Plant, Grey Water Recycling, and water conservation measures.

The Institution has taken social responsibility initiatives. They include organizing awareness programmes on road accidents, eye donation, drug abuse, child labour, environmental conservation, turtle protection, etc. Community development programs like blood donation camps, medical camps, community cleaning, walkathon for spreading awareness on water conservation, sapling planting, flood relief campaign, etc to address locale specific concerns for the benefit of the local community is organized.

# <u>2. PROFILE</u>

# **BASIC INFORMATION**

Name and Address of the College					
Name	JAYA SAKTHI ENGINEERING COLLEGE				
Address	Jaya Sakthi Engineering College, St.Mars Nagar, Near Avadi, Thiruninravur, Chennai				
City	Tiruvallur				
State	Tamil Nadu				
Pin	602024				
Website	www.sakthiec.edu.in				

Contacts for Communication									
Designation	Name	Telephone with STD Code	Mobile	Fax	Email				
Principal	P. Marimuthu	044-26340250	8870680627	044-2634377 0	principal.jsec2006 @gmail.com				
IQAC / CIQA coordinator	Pk. Santhosh	044-26344220	9710929396	-	p.k.santh@gmail.c om				

Status of the Institution	
Institution Status	Private and Self Financing

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

<b>Recognized Minority institution</b>	
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 AuthorityRecognition/App roval details Inst 								
AICTE	View Document	07-07-2022	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	Jaya Sakthi Engineering College, St.Mars Nagar, Near Avadi, Thiruninravur, Chennai	Rural	10.74	43463					

# ACADEMIC INFORMATION

Details of Pro	ogrammes Offe	red by the Col	lege (Give Data	a for Current A	Academic year	)
Programme Level	Name of Pr ogramme/C ourse	Duration in Months	Entry Qualificatio n	Medium of Instruction	Sanctioned Strength	No.of Students Admitted
UG	BE,B E Computer Science And Engineering	48	HSC	English	60	38
UG	BE,B E Mechanical Engineering	48	HSC	English	60	2
UG	BE,B E Biomedical Engineering	48	HSC	English	60	13
UG	BTech,B Tech Artificial Intelligence And Data Science	48	HSC	English	60	11
UG	BTech,B Tech Pharma ceutical Technology	48	HSC	English	60	13

Position Details of Faculty & Staff in the College

Teaching Faculty												
	Profe	essor			Associate Professor			Assistant Professor				
	Male	Female	Others	Total	Male	Female	Others	Total	Male	Female	Others	Total
Sanctioned by the UGC /University State Government		1	1	0			1	0			1	0
Recruited	0	0	0	0	0	0	0	0	0	0	0	0
Yet to Recruit				0		1	1	0		1	1	0
Sanctioned by the Management/Soci ety or Other Authorized Bodies				5				8				26
Recruited	5	0	0	5	6	2	0	8	17	9	0	26
Yet to Recruit		1		0		1	1	0		1	1	0

Non-Teaching Staff							
	Male	Female	Others	Total			
Sanctioned by the UGC /University State Government				0			
Recruited	0	0	0	0			
Yet to Recruit				0			
Sanctioned by the Management/Society or Other Authorized Bodies				8			
Recruited	6	2	0	8			
Yet to Recruit				0			

Technical Staff						
	Male	Female	Others	Total		
Sanctioned by the UGC /University State Government				0		
Recruited	0	0	0	0		
Yet to Recruit				0		
Sanctioned by the Management/Society or Other Authorized Bodies				6		
Recruited	4	2	0	6		
Yet to Recruit				0		

# **Qualification Details of the Teaching Staff**

	Permanent Teachers									
Highest Qualificatio n	Professor		Associate Professor		Assistant Professor					
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt/ LLD/DM/M CH	0	0	0	0	0	0	0	0	0	0
Ph.D.	5	0	0	6	2	0	0	0	0	13
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	0	0	0	17	9	0	26
UG	0	0	0	0	0	0	0	0	0	0

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

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

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

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

Programme		From the State Where College is Located	From Other States of India	NRI Students	Foreign Students	Total
UG	Male	48	0	0	0	48
	Female	31	0	0	0	31
	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	4	4	5	4
	Female	17	15	0	2
	Others	0	0	0	0
ST	Male	0	0	0	0
	Female	1	0	0	0
	Others	0	0	0	0
OBC	Male	16	13	8	11
	Female	29	15	3	3
	Others	0	0	0	0
General	Male	1	0	0	0
	Female	2	0	1	1
	Others	0	0	0	0
Others	Male	0	1	0	0
	Female	0	2	0	0
	Others	0	0	0	0
Total	·	70	50	17	21

# Institutional preparedness for NEP

1. Multidisciplinary/interdisciplinary:

The college offers various programmes. There is abundant scope for implementing a multidisciplinary approach to education as envisaged in the NEP2020. The college has adequate infrastructure and qualified

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	faculty to implement an interdisciplinary approach to education. The institution is well equipped of integrating the study of various academic disciplines suited to their life-long interests. The institution has adequate facilities for the students to prepare for graduate and professional study, for careers in new and upcoming fields, with high proficiency levels and confidence. Since we are an affiliated college, there will have to be a revision of the curriculum by the Anna University to allow this new approach to be implemented in the college.
2. Academic bank of credits (ABC):	The Parent University has not implemented the Academic Bank of Credits regulation to the affiliated colleges. However, once the parent university adopts the same, the college is ready and remains committed to implementing the Academic Bank of Credits under the new NEP 2020.Planning is in progress and will soon be implemented as per the guidelines.
3. Skill development:	In view of the fast-changing technological developments, the various departments of the college set to the students of the college which can be in accord with skills precise at different levels. Already various skills-oriented certificate courses are being offered in the college and all these courses are being conducted by the departments to empower students with employable skills. Internship / field work and project work for UG are mandatory. The institution has numerous functional MOU's with various companies, and organizations to develop the skills to fill the gaps between the industry and academic world. The institution promotes the student and the faculty to learn a new skill set in an increasingly accessible through digital technologies.
4. Appropriate integration of Indian Knowledge system (teaching in Indian Language, culture, using online course):	The preservation of India's cultural wealth must be considered a high priority for the country. The faculties are fully equipped to collaborate, design, and implement curricula that integrate the Indian knowledge system in their respective streams. The faculties are also qualified to design and deliver content for such courses in an online mode. The promotion of Indian arts and culture is seen as very important and it could be effectively imparted through integrating Indian culture into the main curriculum, which would not only develop a strong sense of identity and aesthetic outlook but also enhance creative and cognitive skills among the

	students.
5. Focus on Outcome based education (OBE):	At present all programmes offered by the college follow their respective POs, PSOs, and COs for curricula transactions. These are discussed by the faculty in the class and they are also available on the college website. The attainment of outcomes is measured from the performance of students in the internal assessments and final term exams. Examination system was reviewed and modified to measure the outcome learned by students under Choice Based Credit System (CBCS).
6. Distance education/online education:	During the Covid pandemic, the online education is becoming an essential learning mode online classes were conducted very effectively by all faculties in all programs. Both teachers and learners have skilled the online teaching and evaluation process through different software. So, our institution is well prepared in this regard. Our college proposes SWAYAM and MOOC portals in future so that the Students can earn additional credits through the successful completion of the courses.

# Institutional Initiatives for Electoral Literacy

1. Whether Electoral Literacy Club (ELC) has been set up in the College?	Yes
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
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.	our college regularly conducts voter awareness programme not only to common people but also to under privileged sections of the society like abandoned senior citizens, transgender's and persons with physical disabilities. we distribute pamphlets about electoral participation of each citizens towards creating a democratically strong nation.
4. Any socially relevant projects/initiatives taken by	NSS Cell, Jaya Sakthi Engineering College in

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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.	Association with Avadi Assembly Constituency & Revenue Divisional Office, Thiruvallur. organised National Voters Day Awareness Programme on 22.12.21. In the Eve of National Voters Day Awareness Programme the following events like Essay, Poster Making, Singing, Group Dance, Slogan Competition were conducted. 100 NSS Student Volunteers participated in this Competitions. Due to this Programme more than 1000 peoples got benefited.
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.	All of our 2nd,3rd and final year students are instructed to submit their attested copies of voter ID to the electoral club.

# **Extended Profile**

# 1 Students

# 1.1

# Number of students year wise during the last five years

2021-22	2020-21	2019-20		2018-19	2017-18
204	130	122		213	324
File Description		Document			
Upload Supporting Document		View Document			
Institutional data in prescribed format		View l	Document		

# **2** Teachers

# 2.1

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

Response: 100	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

2021-22	2020-21	2019-20	2018-19	2017-18
48	48	49	48	64

# **3** Institution

3.1

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

2021-22	2020-21	2019-20	2018-19	2017-18
112.02	119.38	126.75	124.83	150.28

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File Description	Document
Upload Supporting Document	View Document

# 4. Quality Indicator Framework(QIF)

# **Criterion 1 - Curricular Aspects**

# **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:**

The academic committee of Jaya Sakthi Engineering College is presided by the Principal, as per university norms frames the academic schedule under headings such as the total number of working days, assessment tests to be conducted, Evaluation, Semester-end examinations, planning of co-curricular and extracurricular activities, Mentor guidance and the same is communicated to all the faculty members through the concerned HODs.

In the beginning of the semester, the heads of the respective departments chart out the core courses, elective courses and collect the opinion of the faculty members and students on their priority of the subject. Based on the welfare of students and experience of the faculty members, the courses are allocated. The Heads of the Department assigns the workload comprising both theory and practical schedule for each faculty member.

Time Table of the respective department is prepared according to the credit assigned for each subject. The final master timetable is compiled by the timetable Coordinators in the department. The course material and lesson plan are prepared by the faculty members, which includes the syllabus, Time Table and lab manual and is based on the number of working days in the academic schedule.

All the faculty members maintain lesson plan files for their assigned subject which is reviewed by the principal and respective HODs at regular intervals of time. The faculty members are motivated to implement the curriculum through their innovative and creative teaching techniques and strategies like multimedia presentations, power point presentation, seminars, national, international conferences, workshops, internship etc.,.. Apart from the regular classroom teaching method as directed by the affiliated university. Laboratory manual is prepared for practical courses by the faculty member in charge of the practical lab.

The syllabus covered by the faculty members are reviewed by the HODs periodically in weekend. As per the academic calendar, five unit tests, two model examinations in each semester are conducted. Remedial classes are conducted to the slow learners based on their performance in the assessment tests and model examination.

The Head of the Department conducts a meeting twice with the subject handling faculty of a particular class where in the staff members fulfills the student's needs. Their feedback is also shared and the course of action is initiated for the same.

Department meetings are conducted by the Head of the Department periodically to discuss about the completion of the syllabus, improvement of students and events to be organized etc.

To bridge the gap between academic and industry, in plant training, industrial visits, workshops, seminars, guest lectures, hands on training, internships and add-on-courses are organized by the respective departments whenever needed. At the end of each academic year, campus drives are conducted by various companies in and around Chennai.

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

# 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:** 27

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: 62.34

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

	2021-22	2020-21	2019-20		2018-19	2017-18	
	188	87	95		119	130	
File Description		Docum	nent				
τ	Upload supporting document		View I	Document			
	Institutional data in the prescribed format			Document			

# **Curriculum Enrichment**

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

## **Response:**

# **Curriculum Enrichment**

Jaya Group of Institution started this Jaya Sakthi Engineering College for the welfare of the students nearby villages who need exposure to show their talents and to have a bright future. In our institution we give equal importance to both genders in their opportunities on Curricular, co-curricular and extracurricular activities. Responsibilities are assigned to the students irrespective of the gender and thus help the students to show mutual respect with opposite gender.

Women Empowerment Cell started with a view to support the girl students in the college to get an environment of security and well being and to promote equality and Women empowerment among students and staff members. The cell takes care of the grievances of girl students and female staff members related to gender discrimination, violence and sexual harassment in the campus. Women's Day celebration is one of the yearly agenda to give opportunities for girl students to show their talents.

## **Professional Ethics and Human values**

Professional Ethics' is offered as a course built in the curriculum to educate students in moral values, integrity and work ethics. Anti-ragging is strictly enforced in the campus and a cordial environment is maintained for the students. National Service Scheme provides wide - ranging opportunities to students in our college to develop their personality through community services. The Code of Professional Ethics for teachers provides a framework of principles to guide them in discharging their obligations towards students, parents, colleagues and community. Community service allows students to develop leadership, creativity, compassion and understanding in terms of the real world.

Students take periodical rallies around the college among the public with the placards and slogans to create awareness on social issues such as prevention seasonal epidemic. This helps them to voice out against the social illegal activities. The NSS joins the Government sector in conducting polio drops and other essential preventive programs. For the past two years many Mega Corona camps and drives were conducted in the college campus.

# **Environment and Sustainability**

Environmental sustainability is the ability to maintain an ecological balance in our planet's natural environment and conserve natural resources to support the wellbeing of current and future generations. The NSS Unit conducts events like mass tree plantations and Go Green Projects to inculcate the idea of environmental preservation and pollution free atmosphere among the students. Students and the faculty members take effective steps towards a sustainable lifestyle using less water, switching to reusable products and reduce single use plastics.

Disaster or crisis management, which is included in the curriculum, helps the students to tackle the dangers of natural calamities and emergency period. Students develop the capacity to meet emergencies during natural calamities which pave the way for national integration and social harmony.

Extra- Curricular programs such as 'Green Environmental Day', Blood Donation Camp, 'Women's Day' Celebration, Girls Hostel Day, Sports Day and College Day are celebrated. Health care awareness programs, Environmental safety demonstration, Motivational speech for career guidance are given periodically.

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

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

**Response:** 70.59

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

Response: 144

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

## 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

# **<u>Criterion 2 - Teaching-learning and Evaluation</u>**

# **Student Enrollment and Profile**

# 2.1.1 Enrolment percentage

# Response: 16.05

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

2021-22	2020-21	2019-20	2018-19	2017-18
64	49	17	21	32

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

2021-22	2020-21	2019-20	2018-19	2017-18
180	240	240	240	240

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

**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: 44.16

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

2021-22	2020-21	2019-20	2018-19	2017-18
61	46	17	20	30

2021-22	2020-21	2019-20	2018-19	2017-18	
62	83	83	83	83	
e Descriptio	n		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			

# **Student Teacher Ratio**

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

Response: 4.25

# **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:**

Jaya Sakthi Engineering College believes that the teaching-learning process should be efficient for knowledge transfer to take place from the faculty members to the students through different systems. Our Institution strongly supports student-centric methods for effective learning. Our faculty is devoted to providing more time and effort towards enhancing students' learning experience.

- The learning process is made Student-Centric for their integrated development and knowledge enhancement and the entire system is geared towards this objective, it is implemented through the following methods:
- Developing communication and presentation skills.

- ICT mode of teaching for active classroom participation
- Students are trained and encouraged to participate in Seminars and prepare project proposals and thus, they carry out the extension of their learning.
- Conduct seminars / Guest lecturers / conferences to upgrade the knowledge of the student.
- Online learning through Spoken Tutorials for the courses offered in the syllabus
- Mandatory library hours to improve reference skills and knowledge level

#### **Experiential Learning**

Experiential Learning [hands-on learning] is offered to our students in the form of Workshops and Industrial Visits. The outcome of the industrial visit is to expose students to face the industry. They also offer students an excellent opportunity to learn about industrial practices, emerging technology through these visits. Our Institution encourages students to do projects by arranging internships and in-plant training. Usage of ICT tools, and project-based learning, enable them to experience the actual work done in industries/organizations. Our students use e-learning tools such as Swayam, NPTEL, Coursera and other platforms to enhance their experiential learning

Participative Learning done through

- Dialogic approach in teaching and collaborative learning
- Learning through programming classes, group-discussions ,debates ,paper presentation, seminars,
- lectures and quiz competitions
- Participating in curricular and co-curricular competitions
- Opportunity to participate in NSS to understand the Social needs and problems.

## **Problem Solving Methods of Learning**

The problem-solving capability of the students can be stimulated by making them work on case studies during the Internal Assessment exams and Model exams. Students undergo mandatory inter relationships as part of the curriculum. Industry experts also share problems that are assigned as final year projects to the students. They learned to analyze and find solution for it.

Analytical subjects in the curriculum are allotted tutorial hours. During these hours, problems related to the subject are solved, given problems as assignments to supplement and enhance the regular teaching-learning process.

Laboratories are well equipped with internet facility which enables students self-centered and widen their learning skills

Assignments and projects help students offer solutions to problems and especially Group Projects facilitate sharing of knowledge and enhance their critical thinking, there by widening the research scope that proves beneficial to the society.

Google Classroom is to streamline the process of sharing files between teachers and students, which makes

learning much more interactive and also to share study materials, video lectures question bank and assignment topics with students.

Discussions on GATE and Competitive Examination questions

Discussions on research paper and journals for subject updates

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

# **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 Numbe	r of sanctioned pos	ts year wise duri	ng the la	ast five years		
2021-22	2020-21	2019-20		2018-19	2017-18	
48	48	49		48	64	
	I	1		1	I	
File Descriptio	n		Docun	nent		
Sanction letters indicating number of posts sanctioned by the competent authority (including Management sanctioned posts)		View I	<u>Document</u>			

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:** 17.51

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

2021-22	2020-21	2019-20	2018-19	2017-18
10	9	10	9	7

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.	<u>View Document</u>
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

# **Evaluation Process and Reforms**

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

## **Response:**

The Exam Cell of an Institution handles all the internal & external examination which includes theory & practical. The announcement of examination date, timetable, academic schedule, conducting of assessment & University exams are carried over by our exam cell. Question paper is prepared by all the faculties of Jaya Group of Institution and it is selected randomly. The timetable of examination is circulated to each and every class and also displayed in notice board. The faculties prepare the keys answers for their question paper. The timetable of examination is circulated to each and every class and also displayed in notice board. The faculties prepare the keys and also displayed in notice board. After the end of all examination the answer key is given to the students which help them to prepare for their semester examination. The Heads of all the department will be in the squad team and monitor students.

The evaluated test papers are given to the students. The faculty will give a feedback to the class on their test performance. If any students has any doubt in with the corrected answer script like total mistakes he/she can take it to the concern course handling faculty and the student will get solution immediately. In case the student is not satisfied he/she can approach the HOD or the Exam Cell. The HOD will arrange a senior course expert to look into the grievance. Scrutiny of answer scripts is done by the senior faculty and HOD to ensure fairness and transparency of the correction.

If a student is absent for a test for genuine reasons, he/she is given a chance to take up the test later on, but this is at the discretion of the HOD. If a student happens to be On Duty on the day of the test or examination, he /she is given an opportunity to take up a retest on a later date with a different question paper.

The end semester examinations are conducted and controlled by the Affiliating University and if students have any grievances, the Principal communicates it to the Controller of Examinations of the University. End semester question paper feedback is given to the University through the proper channel, for the out of

syllabus questions and discrepancies by the concerned faculty members.

The problems of the students in external examination at university level are addressed as per university procedures, by obtaining photocopies of the evaluated answer scripts, re-evaluation and challenge valuation by paying a prescribed university fee. Students and parents can see and verify the attendance and internal assessment marks at any time in the University Web portal using their individual login Credentials

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

# **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:**

**Program Outcomes (PO's)** represents knowledge, skills and attitudes that the students should possess at the end of the engineering program. 1. Engineering knowledge, 2. Problem analysis, 3. Design/development of solutions, 4. Conduct investigations of complex problems, 5. Modern tool usage, 6. The engineer and society, 7. Environment and sustainability, 8. Professional Ethics, 9. Individual and teamwork, 10. Communication, 11. Project management and finance, and 12. Life-long learning etc., required by an engineering graduate on completion of the programme. Program Outcomes (POs) are common for all engineering programmes.

**Course Outcomes (CO's)** defines the cognitive processes that a course provides, resulting in the knowledge and skills that the students acquire at the end of each course. They are prepared by selecting an action verb using Bloom's Taxonomy. COs are prepared based on the curriculum syllabus. Totally 6Course Outcomes are prepared for each subject in the respective B.E/B.Tech programme. The following stakeholders are taken into consideration.Program Specific Outcomes (PSO's) defines the outcomes of a program, making the students realize the knowledge and techniques learn in the course have direct implications for societal betterment and its sustainability. Each program shall specify 2–4 Program Specific Outcomes. Program Educational Objectives (PEO's) describes the career and professional accomplishments which prepare the graduates to achieve, and it is set to assess and ascertain the effectiveness of the program in molding the students to deal with real-world for applying their knowledge and skill that they have acquired.

Vision, Mission, PEO's and PSO's are prepared by the Department for the respective reprogramming

Internal Stakeholders: Management, Teaching Faculty, Non-Teaching Staff, Students

External Stakeholders: Parents, Employers, Alumni

The Vision and Mission statements along with programme educational objectives, programme outcomes, and programme specific outcomes are published in:

Website of the Institute

Faculty Rooms

Laboratory Manuals

Course Files

Communicated in class committee meeting

Communicated to alumni association

The Vision and Mission Statements along with PEO's, PO's and PSO's are displayed (Internal and External Stake Holders) at

## HoD Room

- Department Corridor
- Department Notice Boards
- Seminar Hall
- Faculty Rooms
- Class Rooms
- Tutorial Room

Conference Hall /Department Library

The Vision and Mission Statements along with PEO's are disseminated (Internal and External Stake Holders) at:

- Department Meetings
- Governing Council Meetings
- Workshops / Seminars
- Faculty Development Programs
- Fresher's Induction

#### Course Outcomes are published (Internal Stakeholders Only)at

- Course File
- Lab File
- Project File

#### Course Outcomes are displayed (Internal Stakeholders Only) at

- Class Notice Board
- Lab Notice Board

#### Course Outcomes are disseminated (Internal Stakeholders Only) at:

- Class room Students
- Tutorials Students
- Laboratory class Students

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

2.6.2 Attainment of POs and COs are evaluated. Explain with evidence in a maximum of 500 words

**Response:** 

**Course Outcome** is evaluated based on the performance of students in internal assessments and in university examination of a course. The direct Assessment contributes 20% and University Assessment contributes 80% to the aggregate attainment of a CO.

**Internal Exams:** Three Internal Assessment tests (IAT) are conducted every semester to evaluate the student performance. Each test is of 3 hours duration and is evaluated for 100 marks. Questions for these internal exams have been prepared according to Blooms Taxonomy format and two sets of question papers are prepared by the corresponding course faculty. Assessment of each question is done based on the course outcomes of the subject and the Evaluated papers are verified by a team of faculty.

**IAT I** : It is conducted for 100 marks with 3 hours duration. This exam covers 40% of syllabus in course outcome 1 and 2 and similarly IAT **II** course outcome 3 and 4 of the corresponding subject and also, **IAT III** covers all course outcomes.

**Assignments:** It covers entire course Outcomes and it is given to the students as Assignment I (Co1, Co2), Assignment II (Co3, Co4), Assignment III (Co5) and it is evaluated for 10 marks each.

**Model lab Exam**: A model lab exam of 3 hours duration is conducted to assess the ability of a student to perform a given task by integrating the knowledge gained from related theory course and regular lab sessions and cover the entire syllabus of the course.

**Project**: Performance of individual student is continuously assessed and evaluated by the project guide. Members of a project group shall prepare and submit separate reports. The report shall record all aspects of the work and is evaluated by project guide. Oth Review, 1st Review, 2nd Review, 3rd review and Demonstration are conducted.

**University Examinations**: The final-semester examinations are of 3-hour duration and cover the entire syllabus of the course.

# Performance:

Lab courses provide hands-on experience to the students with course concepts to explore technology used in their discipline. Every student is regular and learns the practical aspects of the lab and develops their skills to become Engineering professionals.

# **University Viva – Voce:**

Viva – Voce is conducted at the end of 8th semester as a part of assessing students' knowledge in engineering courses. An internal and an External examiner are appointed by the Anna University for conducting the viva voce examination.

**Evaluation:** As per the university norms, evaluation of the project is done through internal and external evaluations for 100 marks respectively. Individual student performance is evaluated in all the reviews and external examinations based contribution, presentation skills, and application and analysis abilities of the

#### Self Study Report of JAYA SAKTHI ENGINEERING COLLEGE

student. The technical quality of the project and its progress is enhanced by continuous monitoring of the student work by respective guides through their suggestions. The writing abilities of the students are also evaluated and updated through review/guide suggestions. The details of complete evaluation process are illustrated in the table below.

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

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

Response: 77.49

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

2021-22	2020-21	2019-20	2018-19	2017-18
18	29	58	62	105

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

2021-22	2020-21	2019-20	2018-19	2017-18
19	29	58	105	140

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.	<u>View Document</u>			
Annual report of controller of Examinations(COE) highlighting the pass percentage of final year students	View Document			

# **Student Satisfaction Survey**

# 2.7.1 Online student satisfaction survey regarding teaching learning processResponse:File DescriptionDocumentUpload database of all students on roll as per data<br/>templateView Document

### Criterion 3 - Research, Innovations and Extension

#### **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: 15.04

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)

2021-22	2020-21	2019-20	2018-19	2017-18
4.03	0	4	3.97	3.04

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

#### **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:** 

#### **3.2 Innovation Ecosystem**

#### 3.2.1

Jaya Sakthi Engineering College(JSEC), established MHRDs Institution Innovation Council (IIC) to systematically foster the culture of Innovation among the students across various departments inside the Institute. The focus of IIC is to encourage, inspire and nurture students by supporting them to work with new ideas and transform them into prototypes.

The Institution Innovation Council (IIC) was created by the Jaya Sakthi Engineering College (JSEC) in order to systematically promote an innovative culture among the students in the Institute's several departments. The goal of IIC is to support students as they develop fresh ideas into prototypes in order to inspire, motivate, and nurture them.

#### Innovation, Research & Development (R&D) Cell is performing the following activities

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- Motivating the research collaborations with industries.
- Motivating the faculty members and students for higher education.
- Organizing the workshops, seminars, invited lectures, webinars and conference
- Encouraging the faculty members for doctoral programme and the paper publications.

#### The roles and responsibilities

- To support the faculty members to conduct various technical events such as workshops, training Programs, seminars, conference and symposia.
- To initiate and promote MoU with industries and R&D organizations for consultancy, collaborative research, sponsored projects, industry institute interactions etc.
- To keep everyone informed about announcements by various funding agencies.
- To motivate students and faculty for presenting papers in National and International conference and in reputed journals.

#### The roles and responsibilities of Entrepreneurial Development Cell (EDC)

ENTREPRENEUR DEVELOPMENT CELL (EDC) have been actively conducting program in entrepreneurship with concreted initiatives to promote entrepreneurship among the students.

#### The broad objectives of the ED Cell would include:

- To create awareness on entrepreneurship among students,
- To conduct programs in entrepreneurship enabling skills.
- To guide the prospective entrepreneurs in knowledge based ventures.
- To bridge the gap between Industries and Institutions by carrying out the research activities for the industries.

# **Incubation Centre (JSEC – IC)**

JSEC Jaya Sakthi Incubation Centre (JSEC-IC) Chennai is established for nurturing innovation by encouraging, supporting & promoting technology based startups and providing an ecosystem for their growth by Incubating in the Center.

# The Main Objectives of JSEC-IC

- To encourage and promote innovation and assist start-up companies by establishing and providing physical infrastructure
- To provide incubation services to innovation and start-up companies by facilitating technology and management consulting services and guidance.

# Our focus and thrust Areas for the Incubation are

- Automation
- Electrical and Electronics
- Robotics
- Software / IT based solutions

- Mechanical Engineering
- IOT and Communication

#### Indian Knowledge System (IKS):

Natura Club of the college is functioning with a vision to make the college campus green and Ecofriendly. There are more than 30 species of trees including a wide range of traditional medicinal herbal plants in the campus based on Indian Knowledge System (IKS).

#### The major objectives of the programme on IKS are:

• To share field experiences and research findings of different cases to highlight nature and extent of the practice of such knowledge systems

• To develop a shared understanding of `Indigenous Knowledge Systems in terms of concepts, policies and practices

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

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

**Response:** 42

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

2021-22	2020-21	2019-20	2018-19	2017-18	
16	3	7	8	8	
File Descript	ion		Document		
-	ion rting document		Document       View Document		

#### **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: 1.86

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

2021-22	2020-21	2019-20	2018-19	2017-18
44	97	45	0	0

File Description	Document		
Link to the uploaded papers, the first page/full paper(with author and affiliation details)on the institutional website	<u>View Document</u>		
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: 2.08

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

2021-22	2020-21	2019-20	2018-19	2017-18
55	28	24	46	55

File Description	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

#### **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:**

The extension activities in the neighborhood community create a wide impact on students while they sensitizing on social issues and holistic development which are carried out by students who represent National Service Scheme and Youth Red Cross. The Institution has provided the opportunity to individual student to be part of any service according to their choice. National Service Scheme provides diversified opportunities to students in our colleges to develop their personality through community services. Our students have covered several aspects like adopting of villages and Schools for rigorous development work, Technology transfer programmes, Technologies for rural development, various technical training programmes for self-help groups and rural youth etc., through community services.

#### Some of the noteworthy neighborhood activities

Rally was carried out by the students and faculties of the Institution on "Tobacco Free India". To support this, Students distributed hand-outs and covered 10-kms from the Institution. The performance of students on skits and slogans had a good impact on the neighborhood during Rally.

Marathon was carried out by the students and faculty of the Institution on "Go Green Project" which stimulated students and public to avoid the usage of Plastics.

Swatch Bharat-Cleanliness and Hygiene activities reinforced health and wellness to the neighborhood through NSS Volunteers.

**NSS Project–Green Avadi, KALAM GO GREEN** and **Seed Ball Preparation Drive** were conducted for the benefit of Public in adopted villages.

Swatch-Bharath-Abiyan-PLOGATHON "Environmental Cleaning Programme" was conducted in two Adopted villages Thiruninravur and Nadukuthagai.

Making India Clean-Swatch Barath Abiyan Campaign was conducted on Gandhi Jayanthi every year at Nemilicherry Railway Station to create Awareness among Public.

SWATCHATHON-Environmental Coastal Cleaning Programme Conducted at Marina Beach, Chennai. It had a larger impact on students in reaching out to the population. .

AZADIKA-HIV/AIDS, TB and Voluntary Blood Donation and Cancer Awareness Campaign were organized to create health consciousness among the Public in the Adopted Villages.

An Eye, Medical and Blood Donation Camps were arranged in collaboration with Government Hospital-Thiruninravur. This free consultation service was welcomed by neighborhood.

Road Safety Programme was organized to explain the dangers of violating traffic rules (not wearing helmets, rash driving, drunk and drive etc) which creates the awareness to the audience.

Varadha Cyclone relief aids was initiated with the help of Institution and freebies were collected by NSS volunteers. It helped greatly to the poor and affected population.

NSS Volunteer involved writing and teaching for the Visually Handicapped Students at National Institute for the Visually Handicapped-Karayanchavadi every year.

The Institution also organized various programmes like Mass Tree Plantation, Save Turtle Campaigns, COVID Vaccination Awareness, Pulse Polio Immunization, Dengue Fever Awareness, National Voter's Awareness, Drugs Awareness, International Day of Yoga, Health and Fitness Awareness Programme to the public to bridge our institution with community.

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

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

#### **Response:**

National Service Scheme (NSS) is a Central Sector Scheme of Government of India, Ministry of Youth Affairs & Sports that aims to develop the personality of student volunteers through community services and to make them sensitive and responsible human beings who are aware of the socio-economic realities of India.

Our NSS is actively participating in various National & State level programs and got meritorious awards.

• Mr.V. Bhuvaneshwaran our student of third year Mechanical Engineering has got best NSS volunteer award. He got IGEN Gendistranscon Award of the year 2020 -2021.

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- Mr.S.Gowtham, our student of third year Mechanical Engineering has got best NSS volunteer ward. He got IGEN Gendistranscon Award of the year 2020 -2021.
- **Mr.M. Rupesh** our student of third year Mechanical Engineering has received award for 4 th state level silambam championship award from TamilNadu silambam Committee (TSC) in 2022.
- Our NSS Programme Officer **Mr.P.Karthikeyan** has got Most Valuable Organizer Award from IGEN IN 2021.
- **Ms.M.Hemalatha**, our student of third year Bio Medical Engineering has got Third prize in TALENT STARS Dance Competition Conducted by BANNARI AMMAN INSTITUTE OF TECHNOLOGY Which was held in 2021.
- Our NSS Programme Officer **Mr.P.Karthikeyan** has participated one day orientation programme for YRC Conducted by Indian Red Cross Society in 2019.
- Our NSS Programme Officer **Mr.P.Karthikeyan** has got Most Valuable Award from Maatram Smile Blood Bureau association with Lions Club of Velachery for Blood donation Camp in 2017.
- Mr. R.Arulmozhidevan, our student of third year Mechanical Engineering has got best NSS volunteer award. He got IGEN ENVIRONTHON Award of the year 2020.
- Mr.V. Manikandan, our student of third year Mechanical Engineering has got best NSS volunteer award. He got IGEN Legendary Seminar 01 Award from Institution of GREEN Engineers in the year 2020.
- Mr.P.Karthikeyan, Our NSS Programme Officer has got best NSS organizer award. He got IGEN Gendistranscon Award of the year 2021.
- Our NSS Programme Officer Mr.P.Karthikeyan has participated one day orientation and PFMS

#### Self Study Report of JAYA SAKTHI ENGINEERING COLLEGE

Training programme for programme officer held on 2018 Conducted by NSS Anna University.

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

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

Response: 86

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

2021-22	2020-21	2019-20	2018-19	2017-18
19	16	18	18	15

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

#### 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: 21

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**

#### **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:**

Jaya Sakthi Engineering College is an eco-friendly campus spread over an area of 10.74 acres creates a positive learning environment. Our infrastructure includes communication and transportation, sewage, water, education system, health system, purified drinking water and monetary system. The college has spacious lecture halls, administrative office, good collection of library, workshops and well equipped lab facilities. The college purpose is to create and develop infrastructure for the quality teaching environment. The college has extensive links to IT resources for the benefit of students. Ramps and Wheel Chairs are also available for them.

The college provides 5 UG courses for which well-equipped 20 class room, 5 Tutorials room, 5 Seminar Hall, 3 Smart class with ICT facilities 20 laboratories and a computer centre. Broadband connection with a bandwidth of 100 mbps is provided. Wi-Fi access is available for staff and students with in the campus. The college also has a language lab with multimedia facilities.

The institution has the effective Placement Cell, Career guidance cell, Women's Empowerment cell, Indoor games facility, Yoga and Meditation Room, Medical Room, Hostel for Boys & Girls. Adequate parking facility, Public Announcement System, Generator with 125 KVA, Fire Extinguishers and RO plant for drinking water are maintained.

The College has a spacious multi-purpose playground for outdoor games which include, Cricket Pitch, Football Field, Basket Ball, Volleyball Court, Throw Ball Court, Kabaddi Courts, Ball Badminton and Kho-Kho Field

The college has indoor games facilities such as Carom and Chess with an Exclusive indoor game Hall. A well-equipped gymnasium is maintained for the students, Auditoriums is used for cultural programmes & activities for the students.

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

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

Response: 14.73

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

2021-22	2020-21	2019-20	2018-19	2017-18
25.195	0	37.83	30.253	0

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)	<u>View Document</u>

#### 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 college Library spread over carpet area 7210 sq. ft and it is an important source of knowledge for young minds. The college has automated ILMS Software provided by Win LMS Version 16.0 for serving to the requirements of the library needs of the students.

The Software makes easy in lend and return of books and also the additional facility of reserving a book by

#### Self Study Report of JAYA SAKTHI ENGINEERING COLLEGE

students in case if it not available when they search it through the software. The books are bar code marked to identify easily and for faster processing. The students ID card is tagged with Bar code for automating student's identification and speeding library processes. The Library has in total 2 machines for the ILMS software operations and Students access to digital materials.

The Library provides access to students to e-Journals through DELNET subscription, J-gate and access to NDL free e journals collection through club membership and provided the link for Open Access E-Journals, E-Books and E-Thesis.

The Library is open from 8.00 AM in the morning to 7.00 PM. in the evenings. The library also has reprographic facilities. The foot step into the library averages 365 for the past five years. The Library has a quality of Digital materials in the form of CDs etc. The library provides screen reader software to enable visually impaired students. The books arranged using the same, and are searchable very easily. The bar code also helps lending and return of books to be faster. The multiple copies of important books help students not to wait for a book for long time. The reservation facility in ILMS helps in alerting the students at once it becomes available. The library management committee has been created to provide qualitative library infrastructure to the students and faculties. The committee decides about the required books for various department regarding updating and about subscription for the various journals and newspapers depending upon the student's requirement.

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

#### **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 College has the practice of enhancing and deploying IT infrastructure according to the timely requirements. The institution has 260 computers, 10 LCD projectors, 3 Smart boards, 04 Servers, 12 printers, 05 scanners, 02 copiers. Regular promotion is carried out through purchase of systems with latest configurations.

The College has leased line Internet facility with a bandwidth of 100 Mbps with Wi-Fi browsing facility to

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students and faculties. Latest software as per the curricular requirements are added. Customized software is used to maintain students' details, generate TCs other documents. Teaching and evaluation are the two sides of a coin. Exam cell plays a key role in evaluation part. The Exam Cell in JSEC is a confidential section with the responsibility of smooth conduct of Internal Assessment Tests and Anna University Examinations ( both Theory and Practical ) for all courses in fair and systematic manner. The Exam Cell is under the direct supervision of the Principal with two Staff Coordinators. The examination cell is equipped with Computers, Printers, and copier machine. The library is well equipped with automated Integrated Library Management System in Circulation, automated entry registration with Computer Systems for accessing eresources.

The college has pioneered in using open source software where ever possible before the university has included it in the curriculum. The labs have equal number of machines configured with Linux in addition to Windows.

The College has the multimedia enabled language lab and is used by ever student in improving their language skills. The aim of Language Lab is to augment LSRW and GV skills (Listening, Speaking, Reading, Writing and Grammar, Vocabulary) through tests, activities, exercises etc., comprehensive webbased learning and assessment systems with the engineering subjects for the students. Students who are weak in English communication skills – reading, writing and comprehension will be identified by the faculty who teach communication skills course and will be given assignment to work in language lab.

The college provides every hardware and software requirements as prescribed in the curriculum in the timely manner and also adds IT infrastructure according to the recommendations by the employers. The CCTV cameras provide safety through surveillance of movements around the campus.

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

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

#### Response: 0.71

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

Response: 288

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.	<u>View Document</u>

#### **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: 26.96

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)

2021-22	2020-21	2019-20	2018-19	2017-18
23.4945	59.27	21.1168	11.5363	55.2831

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)	<u>View Document</u>

## **<u>Criterion 5 - Student Support and Progression</u>**

#### **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: 73.62

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

2021-22	2020-21	2019-20	2018-19	2017-18
162	109	98	151	211

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
Institutional data in the prescribed format	View Document

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

Soft skills
 Language and communication skills
 Life skills (Yoga, physical fitness, health and hygiene)
 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)	<u>View Document</u>
Report with photographs on ICT/computing skills enhancement programs	View Document
Institutional data in the prescribed format	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: 79.86

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

2021-22	2020-21	2019-20	2018-19	2017-18
142	82	106	194	269

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

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

#### **Student Progression**

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

#### Response: 64.16

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

2021-22	2020-21	2019-20	2018-19	2017-18
17	29	44	71	61

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

2021-22	2020-21	2019-20	2018-19	2017-18
19	29	58	105	135

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)	<u>View Document</u>
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

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

Response: 8.87

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.)

2021-22	2020-21	2019-20	2018-19	2017-18
1	1	5	4	0

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

#### **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: 26

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

	2021-22	2020-21	2019-20		2018-19	2017-18	
	21	3	1		0	1	
File Description							
F	ile Description			Docum	nent		
-	<b>The Description</b>	locument			nent Document		

Institutional data in the prescribed format <u>View Document</u>

# **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: 47

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

2021-22	2020-21	2019-20	2018-19	2017-18	
87	0	38	59	51	
File Description	n	]	Document		
-	on ting document		Document View Document		

#### 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:**

Jaya Sakthi Engineering College Alumni has played an essential role in shaping the careers of students into technocrats, leaders, entrepreneurs, researchers and global managers. The association had been operating without registration till 2007. Now, the Jaya Sakthi Engineering College Alumni The Alumni association has an active calendar and connects with Alumni regularly. Alumni association undertakes activities such as, to receive feedback on the design, review of syllabus, to enhance employment opportunities, get-

#### Self Study Report of JAYA SAKTHI ENGINEERING COLLEGE

togethers, alumni directory, continued learning opportunities and administration of social services. Association organizes alumni reunion once in a year to provide an opportunity to meet junior students and faculty to share their professional experience and also guide them for their future aspects like employment, knowledge acquisition and training updates.

The Jaya Sakthi Engineering College Alumni Association acts as the bridge between past and present, endeavoring to build a better future. Aims & Objectives of the Alumni Association

1. To maintain and update contacts of Alumni.

2. To conduct meetings regularly at least once a year.

3. To communicate the college events periodically to the Alumni.

- 4. To take up the help of Alumni guidance towards higher education.
- 5. To help the poor and bright students with the help of Alumni.
- 6. To help the unsettled Alumni with the help of Alumni.

The Alumni Association looks to forge a mutually beneficial relationship between the institute and its alumni network. The team intends to increase alumni engagement in various academic, placements, cultural and social activities at the institute and beyond to ensure interaction between them and the students.

Contributions involving Finances the alumni of our Institution has contributed modestly to their alma mater in the following manner,

- 1. Supporting economically weak Students: Alumni support our students either partially or fully for their academic fee.
- 2. Expert speaker: Alumni are invited as keynote speakers for training programmes, seminars and as distinguished speakers for graduation ceremony.
- 3.Curriculum enrichment: Alumni contribute for curriculum enrichment through their structured feedback on curriculum in-order to keep pace with the recent advancements in industry.

#### **Non-Financial Contributions**

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The college utilizes the intellectual inputs of its alumni working in the academic or professional fields to enrich the curriculum and enhance the quality of interaction between alumni and the Institution. Following are some of the non-financial initiatives by the Alumni Association.

- 1. Share their knowledge and experience to develop the students' skills.
- 2. Guide the students in interview skills, group discussions and other employability skills.
- 3. Give insights into the corporate work culture.
- 4. Explore and identify Placement and Internship opportunities for students.

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

## **<u>Criterion 6 - Governance, Leadership and Management</u>**

#### 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 achieve Technical Education Excellence through Innovative Teaching, Research and Entrepreneurship who create wealth for our nation and develop a fulfilling global society.

#### MISSION

- To create a state of art educational institution contributing to innovation entrepreneurship, engineering and technology for our country.
- ٠
- To Provide Quality Education, Self discipline and Ethical values.
- To identify student's skills and encourage them through creative and enriching methodologies and share their knowledge to create new society.

#### The governance and leadership

The institution sets an example through its governance and administration with the goal of generating students who are deeply devoted and socially responsible. The institution has a set of clearly stated guiding principles that helps the students to achieve the desired results and eventually, benefit society. At all levels of management, diverse decision making processes effectively execute the governing principles. Governing Body, College Council, The Finance Committee and other initiatives tackle both academic and non academic issues. Decentralization encourages the participation of all stakeholders in the administrative and curriculum design processes. The college thus maintains responsibility and transparency in all of its activities to the satisfaction of all parties involved, increasing the administration's objectivity and impartiality.

The principal assisted by HOD's, administrative heads, officers and coordinators of various cells and committees runs numerous quality improvement programs in the college. The HOD sets up effective regulation for their departments with the consent of the Principal. Faculties are assigned with roles and responsibilities to work in a comfortable environment with full transparency. HOD's conduct regular meetings in the department. Suggestions from teachers, students are considered. The principal collects the

important issues from all the HODs of the department and find the solution for those issues. Approved decisions are distributed to the stakeholders for execution.

#### Decentralization and participation in the institutional governance

The college sends faculty members from all departments to attend conferences, seminars, work shop, short -term training programs to strengthen their leadership skills. When college level events such as Annual Day, Sports Day and Hostel Day are held, the entire teaching and non- teaching staffs are used in various committees for the successful implementation of the function.

Teachers, the supporting pillars of the educational institution with their dedication and commitment on various academic and administrative bodies make decisions about the successful delivery of educational services. The institution offers to the faculties' different roles in different setup such as placement, grievance elimination, sports, anti- ragging and cells such as internal quality assurance of the faculty members as well as students. Students contribute to various forums such as the NSS and YRC. The result of discussions in the committee are noted and forwarded to the head of the institution who in turn discusses the relevant matters with HODs and submit to the management for further decision –making.

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

#### **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:** 

**Role of Administrators & Decision Makers** 

**Chairman & Secretary** 

The Chairman oversees and guides the day to day happenings and ensures the Institution is on the path to accomplishing the goals of the Vision & Mission.

The Secretary extends his assistance to the Chairman in monitoring the implementation of the strategic plans framed for the Institution's development.

#### **Principal:**

Principal functions as the Head of the Institution to Manage & Monitor all the Administrative and Academic activities in line with the AICTE, Anna University and the Government of Tamil Nadu norms, rules & regulations in all aspects.

#### Administrative Officer

Assists in the implementation of the decisions approved by the Governing Council. Oversees infrastructure maintenance and monitors the financial position, plans and budgets. Keeps the Management informed about all essential development and requirements

#### **Placement Officer**

The Placement officer identifies and imparts students' training needs, maintains close association with industry and arrange for campus interviews.

#### Heads of the Department

- Plan and execute academic activities of the Department
- Maintain discipline and culture in the department, class room and inside the campus.
- Maintain the department neat, clean and orderliness.
- Responsible for all the academic events of the Department.
- Monitor academic activities of the department, Plan & prepare Department Budget
- Looks after day to day activities relating to teaching and other workloads of his/her teaching and non-teaching staff.

#### **Appointment, Service Rules & Procedures**

Appointment of Faculty is made with the utmost care by following a structured interview process. Distinguished academicians are part of the interview panel following the norms of AICTE and Anna University

#### Internal Quality Assurance Cell (IQAC)

In line with the strategic plan, the IQAC was established in 2022. The IQAC plays a crucial role in monitoring teaching-learning process, academic planning and implementation of quality measures

#### The Perspective plans:

The College has the following perspective plans

- Diversified Courses
- Academic-Industrial Oriented Curriculum
- Effective Teaching & Learning

#### **Deployment Strategy:**

The usage of assets efficiently indicates the managerial strength of the institution. Our College comes up with basic pre-decided deployment approach to disburse the finances successfully

Programs consisting of seminars, workshops, conferences, visitor lectures, guest lectures, personal development programs, pupil guide programs prepared best with the previous permission from the chairman.

1.To establish better academic practices and procedures

2.To be a choice for good students and qualified faculty

3.To encourage Research and consultancy

The task involved for this strategy are

1.Revision of curriculum & academic regulations

2. Revision of examination regulations & procedures

3.Introduction of best practices

4. MoUs with industries and research institutions

The institute is to introduce new courses to develop communication skills and skill development courses.

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

#### 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	<u>View Document</u>
Annual e-governance report approved by the Governing Council/ Board of Management/ Syndicate Policy document on e-governance	View Document

#### **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:** 

The Faculty and Staff are the most vital components of any organization. Their well-being and satisfaction will propel an organization towards its goal. Welfare measures boost their morals towards work and commitments. Jaya Sakthi Engineering College provides a wide range of welfare measures for teaching faculty and non-teaching staff.

#### Welfare Measures for Teaching Faculty

- Casual, Medical and Earned leaves as per the Institution's policy.
- Female staff members can avail of maternity leave of up to 6 months.
- EPF is provided to employees as per the Institution's policy.
- Sponsorship for attending seminars, workshops, FDPs and conferences.
- Support to join professional body membership.
- On-duty to pursue PhD and attending external examiner duties and invigilation.
- Interest-free loan for marriage or medical emergencies.
- Vacation holidays during the winter and summer breaks.
- Free transport for medical emergencies.
- Gifts for marriage, housewarming functions.
- Free accommodation for faculty staying in the hostels.

#### Welfare Measures for Non-Teaching Staff

- Casual Leaves and Medical leaves are given as per government norms.
- Vacation Leave during summer and winter breaks.
- Gift for the marriage of staff and their dependents with leave.
- Free transportation and food.
- Medical reimbursement for injury at the workplace.

#### Appraisal System

Jaya Sakthi Engineering College follows Academic Performance Indicators based On-Performance Based Appraisal System as Per UGC Regulations, 2010

#### **Principal Appraisal**

The Principal, who is the Administrative and Academic Head of the Institution appraises the HOD and other faculties with various parameters like

#### **Evaluation of HOD's**

- Department academic & Non-academic achievements
- Leadership capability
- Coordination ability
- Department Research /Publication achievements

#### **Evaluation of Faculty**

- Staff teaching ability
- Staff support/involvement for college activities
- Work attitude
- Participation in research & publications activities
- Support in Managerial activities

#### Head of the Department (HOD) Appraisal

It is a value-based assessment by collecting the values of each performance and making calculations to publish their results. HOD assesses the performance of the teaching faculty members by,

- Staff teaching ability
- Research Practices
- Subject Knowledge
- Level of communication skills
- Work regularity and quality
- Delivery of content
- Mentoring process

#### Self-Appraisal

It takes into account the involvement of faculty members and their effective presence at the department/college level. Self-appraisal is prepared on the basis of these facts.

Subject Skills

- Students feedback report from HOD
- University Examination results
- Counseling and interacting with the students
- Participation in FDP / Seminar / workshop
- Journal publication
- Quality of Projects
- Any Extra-curricular Activities

#### **Non-Teaching Staff**

It is a value-based assessment by collecting the values of each performance. The parameters for assessment are as follow

- Training Support
- Skills development
- Housekeeping and adapting safety practices
- Active participation in the teamwork

The annual appraisal forms are consolidated and are required to be presented before the Governing Council, who will then categorize the performance levels. The Good Performers are rewarded with additional increments.

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

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

**Response:** 80.93

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

2021-22	2020-21	2019-20	2018-19	2017-18
55	28	24	101	0

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

# **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:** 43.77

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

2021-22	2020-21	2019-20	2018-19	2017-18
27	23	26	25	29

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

2021-22	2020-21	2019-20	2018-19	2017-18
8	8	8	8	8

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

#### **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:** 

#### **Mobilization of Funds**

The Institution has a well-defined and systematic mechanism to mobilize and monitor the effective utilization of available resources. When it comes to the utilization of funds and resources, before the start of a new academic session, the Principal requests all the HOD's for a tentative budget for the year.

#### **Tuition Fee**

The major source of regular income is from the periodic tuition fees collected from the students.

#### **Transportation Fee**

The nominal charges collected from the students towards the transportation fees is another marginal source of income.

#### **Hostel Fee**

Hostel accommodation is essential for the students who come from far places, and the fee charged for the maintenance of hostels is another source of income to the Institution.

#### Non-Government Bodies and Sponsorship Receipts

Donations are accepted from Alumni, Industries, Individuals and Philanthropists for Institutional activities.

#### **Contribution by the Trust**

The college is functioning under the Jaya Educational Trust, formed to cherish the memory of the Chairman's mother. The Trust contributes a fund to the Institution annually.

#### **Optimal Utilization of Resources**

The details of the purchased items are entered in the stock register, and the bill payments are passed after the physical verification/evaluation of the items. Audited financial statements including Income and Expenditure Account, Balance Sheet are prepared by qualified auditors. The funds are utilized as given below.

**Recurring Expenses** 

Salary to staffs, academic activities and extra-curricular activities are met with the fees collected.

#### Infrastructural development and Building construction Works

Management allocates budget to create and upgrade the infrastructural facilities according to the needs and requirements. Loans are availed and corpus donations received from well-wishers and individuals are judiciously utilized for the same.

Seminars, Conferences and Faculty Development Programme and other Co-curricular Activities

Every department of the Institution organizes seminars, workshops and conferences. Through these programmes, the Institution receives registration fees from the participants.

**Internal Audit** 

#### Purpose

Internal auditing is a managerial control that functions by measuring and evaluating the effectiveness of other financial and administrative processes.

#### 2. Objective and Scope

- Reviewing and appraising the soundness, adequacy, and application of accounting, administrative, and other operating controls, and promoting effective control at a reasonable cost.
- Ascertaining the extent of compliance with established policies, plans, and procedures.

#### 3. Authority

The internal audit staff is authorized by the Management to conduct a comprehensive program of internal auditing. The internal auditors are permitted to have access to college functions, records, properties, and personnel

#### 1. Reporting

The internal audit staffs report to the Management and where appropriate

#### External Audit

In the mandatory annual external audit by competent registered professionals, the auditors practice standard procedures and processes to obtain a reasonable confirmation to rule out any financial irregularities or discrepancies in the balance sheet. Based on their findings, they record objections, if any, along with the balance sheet for the year, properly reconciling the income and expenditure.

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

#### 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)** has contributed to ensuring continuous improvement in quality through Academic Administrative Audit process and enhancing the student's performance through the Mentoring system. The IQAC is monitoring the entire process of the academic quality and reports to the Principal and the Steering committee. The decisions are forwarded to the management for approval and they also take initiatives to facilitate the development and quality improvement of the environment in the institution.

#### **Objectives of IQAC**

- To ensure continuous improvement in the entire operations of the Institution.
- To ensure all stakeholders, including students, parents, faculty, staff, employees, funding agencies, society in general, are connected.

#### Mentoring System for Advanced and Slow Learners

Successful mentoring starts when the faculties start understanding the mentee's behavior. When it comes to academic growth, a good relationship between the mentor and the mentee is essential. Peer mentoring is carried out among students to take suitable remedial measures to overcome student's issues.

#### **Mentoring Process**

This process has been established as 'Mentoring System'. Each faculty will be assigned as the mentor of a group of 10 to 15 students. First-year students will have mentors from the Department of Science &Humanities, and second, third, fourth year students will have mentors from the respective Departments.

#### **Outcome Based Education through PO-CO Matrix**

The practice of Outcome Based education has been introduced in the year 2017. As a part of it, the question paper setting is based on Blooms Taxonomy Level. The course outcomes (CO) of a particular course are defined by the subject expert. The Outcome is measured for each course, and the attainment of the Program Outcome is calculated by the PO-CO matrix. Finally, Programme Educational Objectives and Program Outcomes performance is calculated using the PO-PEO matrix. Content beyond syllabus has been taught to bridge the gap between syllabus & recent trends in technology by conducting seminars, workshops, projects, and Industrial Visits.

#### **IQAC Monitors & Evaluates the Teaching Learning Process**

- The IQAC organizes regular academic audits to ensure effective implementation of the teachinglearning process and maintenance of course files.
- Verification of Internal test analysis, Assignments, and Question papers.
- Arrangement of special classes for slow learning students during evening hours.
- Analyzing any deviations from the benchmarks and report them.
- Feedback from the stakeholders (Students, Alumni, Industry experts and Parents)

#### The following documents are verified during the Academic Audit

- Adherence to the academic calendar in line with university
- Timetable & Faculty workload
- Minutes of Class committee meetings and department faculty meetings.
- Student attendance and assessment record.
- Course File and course materials.
- Remedial classes for weak students

- University Result Analysis
- Mentoring system
- Industry visits
- Budget details
- Details of Workshops, Seminars, FDPs, conferences organized
- Faculty details Publication & Participation details

The IQAC of JSEC Engineering follows a systematic process to review and implement reforms in the teaching learning process

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

#### 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

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

#### **Institutional Values and Social Responsibilities**

7.1.1 Institution has initiated the Gender Audit and measures for the promotion of gender equity during the last five years. *Describe the gender equity & sensitization in curricular and co-curricular activities, facilities for women on campus etc., within 500 words* 

#### **Response:**

Gender equality makes our communities safer and healthier. One of this institution's goals is to provide quality education for the required societal groups. We focus on gender equality and gender sensitivity. Equal opportunities are provided to the students for both genders to mature and become competent, responsible citizens in the future. The college makes an attempt to keep a gender balance in its faculty.

The **Grievance Redressal Committee** (GRC) will review all issues regarding the girl students & lady faculties. The Committee will arrange other things such as Women's Day celebrations and run initiatives for gender sensitization. Female employees or girl students who have experienced harassment or discrimination inside campus from other employees or students. the institution had taken the action on the particular issues through GRC. The GRC will appoint an inquiry committee as it sees fit to look into a specific complaint, offer advice, and propose remedies.

The Jaya Sakthi Engineering College supports the professional and personal growth of female students. Every year, the college sponsors a special event for female students and promotes their bold engagement with society. Through higher education, we work to produce capable and independent women for the society. We place a high importance on young women's capacity to find employment and enhance their skills through specialized, career-focused education.

We have the Vishakha Committee in our college to guarantee the protection of female students and give safety to women. In order to highlight the significance and contribution of women in society, we invite guest speakers from a prestigious sector will give a talk on the value of women in the society.

#### Safety & Security

Electronic surveillance is performed through CCTV cameras located at important places and is regularly monitored to check the movement of people. Security personnel patrol the campus regularly and most notably during the night to ensure the safety of everyone on the campus and girls hostel. Special attention is given to students in the hostels. Their safety is ensured through continuous monitoring of the wardens. For the safety and protection of students, all day-scholars girl students are asked to use using the college buses only.

#### Counselling

The primary goal of the counselling centre is to support students' overall development and the intellectual, emotional, social, and cognitive growth of each individual. Mentoring provides students emotional and instrumental support, guidance, encouragement and better environment in college. Mentor mentees relationship between faculties and students is healthier in the development of students in their academic

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and discipline. Girls are given couselling to support them in their academics and safe environment.

#### Common room

The Common room is only available to female students. It is furnished with sufficient tables and chairs. It has female restrooms that are attached. There is a dispensary as well as community areas. For medical situations, immediate first assistance is given. For emergency situations, the college has partnered with an ambulance service and other Facilities for girls student.

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

#### 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

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. An 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

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

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:**

Jaya Sakthi Engineering College has always been at the forefront of sensitizing students to the cultural, regional, linguistic, communal, and socio-economic diversities of the state and the nation. The Gender Equality Policy focuses on equal access, opportunities, and rights for women and men.

Jaya Sakthi Engineering College undertaking various initiatives in the form of celebration of days of Eminent personalities National Festivals, NSS, YRC and other such activities to provide for an inclusive environment by bringing students and teachers with diverse background on single platform for creating inclusive environment. The extension activities are targeted towards enabling a holistic environment for student development. The subject professional ethics is made mandatory to all U.G students across disciplines.

Two important national festivals, Republic Day and Independent Day are celebrated every year in our College Campus. All teaching, non teaching staff and students participate for the cause of nation. To build a nation of youth who are noble in their attitude and morally responsible, the college organizes and conducted several activities to build and promote an environment for ethical, cultural, and spiritual values among the students and staff.

To develop the emotional and religious feelings among the students and the faculty, commemorative days are celebrated on the campus with the initiative and support of the management for not only recreation and amusement but also to generate the feeling of oneness and social harmony.

With great commitment the national festivals, birth anniversaries and memorials of great Indian personalities like Mahatma Gandhi Sardar Vallabhbhai Patel, Pandit Jawaharlal Nehru, Dr. Bhimrao Ambedkar, Sarvepalli Radhakrishnan, Lal Bahadur Shastri. On birth anniversary of Sardar Vallabhbhai Patel on October 31, institution celebrates Rashtriya Ekta Diwas (pledge is taken by staff and students on

National Integration Day) every year.

The college and its teacher and staff jointly celebrate the cultural and regional festivals, like Navarathri, Christmas, Ramzan, Teacher's day, student orientation and Induction program, Youth day, Yoga day, Women's day, rally, plantation, etc. are performed in the campus.

Jaya Sakthi Engineering College is proactively taking efforts in providing an inclusive environment. The initiatives are to promote better education, economic upliftment of the needy and setting communal harmony. Unnat Bharat Abhiyaan (Under Ministry of HRD)-Adopted 4 villages in thiruninravur region to conduct activities for their socio-economic development. Blood donation camp is annually organized at Jaya Sakthi Engineering College in association with NSS of Chennai, where students, teaching and non teaching faculty members contributed voluntarily by donating blood for the noble cause of serving society and proudly adorn the badge of a blood donor.

The institution believes in equality of all cultures and traditions as is evident from the fact that students belonging to different caste, religion, regions are studying without any discrimination. Students who hail from economically weaker families are supported with fee concession, and also management scholarships.

Special facilities are created for the Divyangjan students. Their mobility is supported with the provision of ramps and wheelchairs. Special restroom facilities have been provided in the college premises.

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

#### **Best Practices**

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

**Response:** 

# **Best Practices-1**

#### **1. Title of the Practice**

#### **Student Mentoring System**

#### 2. Objectives of the Practice

- To support the students to achieve progress in personal, academic, social and emotional aspects.
- To establish a lively relationship between the students and the faculty members that will guarantee responsible discipline.
- To monitor the thoughts of the mentees and provide the course correction wherever required.

- To provide a continuous learning process for both the mentor and the mentee.
- To strengthen Mentor Mentee relationship.
- To guide the students in choosing the right career and higher education etc.
- To encourage the students to develop the quality of their life and make them as a responsible citizens.

#### 3. The Context

The nature of student's background i.e. catering to different socio-cultural and economic diversity necessitates mentoring being opted as one of the best practices by the institution.

Student Mentoring System was started at Jaya Sakthi Engineering College with a view of sharing the knowledge, advice, and resources from the mentor to mentee. Most of our 70-80% students come from rural and humble backgrounds. Hence, it is essential for the Institution to provide Mentoring support to these students. Mentoring System guides and counsels the students in academic and non-academic matters, including personal issues, to help them attain their goals. Mentoring is a valuable strategy for providing students with the emotional and instrumental support they need to achieve their goals.

#### 4. The Practice

Mentorship Program always aims to help the mentee attain his/her career path by imparting guidance, motivation, role modeling and emotional support. Faculty mentors are assigned to a group of 10-15 students for the whole duration of a semester. The students are mentored by their respective department faculty members. Mentoring session is conducted every Saturday from 3:30 PM to 4 PM on a regular basis. This mentoring session is compulsory for every student to attend without fail. If at all some student misses out due to valid reason, the Mentor has to schedule a separate session and get it completed.

The mentoring parameters are based on four aspects i.e. academic, attendance, career and general. During the discussion, inputs are provided by the mentor for the betterment of the mentee. The Mentor will recognize the mentee strengths and weaknesses. The mode of communication between the mentor and mentee can be established through different modes.

Each Mentor maintains a Mentor files containing the personal and academic activities of mentee and is verified by the Head of the Department. The files are updated with mentee results, achievements, certificates, attendance, scholarships and project details. The grievances of the mentees are taken up by the mentor and if necessary it is forwarded to the Principal for necessary remedial actions. The mentoring system is evaluated by the Principal monthly to ensure better quality and efficiency in mentor/mentee practice.

#### 5. Evidence of success

A strong and caring triangular bond is cemented day by day among parents, teachers and students.

Consistent caring and guiding acts as a morale booster in improving regular attendance and contributes to personal and educational growth of the students

Continuous improvement in the mentor/mentee interaction, Mentee discipline and their interpersonal skills.

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Student attendance has been improved from 75% to 90%, which has significantly reduced the dropout rate.

Establishment of a good relationship between faculty members and student communities which has provided a pleasant atmosphere in the class room as well as in the college campus.

The gradual increase in pass percentage and also increase in the percentage of students placed through on/off campus recruitments reflects the success of the Mentoring System.

#### Case Study:

1. S.Praveen Kumar, II-Year MECH had 7 arrears in odd and even semester 2018-19. Through motivation and guidance, He was able to clear all arrears at the end of his course completion.

2. J.Sam Solomon I-Year MECH had 8 arrears in the academic 2017-18. Through proper guidance and counselling, He was able to clear all arrears.

#### 6. Problems Encountered and Resource Requirement

According to research, quality mentoring relationships have powerful positive effects on young people in a variety of personal, academic, and professional situations.

Mentoring is a two way process where if one side is showing less interest, it would collapse the healthy relationship.

Fear of opening up with personal issues with the Mentor and also Lack of mentoring experience among the faculty.

# **Best practices-2**

#### **1. Title of the Practice**

Skill Development Centre (SDC)

#### **2.** Objectives of the Practice

- To seek full time Employment for all the Students
- Prepares students to meet the Industry Expectations
- To improve Programming skills in order land placements with various companies
- To develop socio-emotional skills, which include Leadership, Teamwork and Self-control

#### 3. The Context

Getting a good job in a reputable organization is a dream for most Engineering Students. Employment skill training essential in shaping students career goals. Every Engineering Students dream is to be hired by a good organization where they can exhibit their skills. Considering this important factor, it is realized the training is necessary for our student to improve their Employability skills and achieve good placements in various industries.

#### 4. The Practice

The Employability skills development program has been designed to increase student awareness in career planning and career mapping.

# $\cdot$ Ensure that the students are staying up-to-date with the knowledge relevant to the industry.

#### •Encourage students to watch the trends and practice foresight.

#### 5. Evidence of success

The Pre Final years students are visiting the SDC regularly and clarifying doubts for the future enhancements. After creation of SDC, Our student batch done a project **in Real-time object detection to improve surveillance methods** is a promising application of Convolutional Neural Networks. The **success of Employability Skills Development Program** is to provide students with personal and career-related support, with a special emphasis on training students with employability skills and ultimately providing placement in various industries/ organizations.

#### **1. Problems Encountered and Resource Requirement**

We are not able to keep some of the hardware projects because it is connected with Computer.

Encouraging students is a big task for the mentors as well as other faculty members.

File Description	Document
Best practices as hosted on the Institutional website	View Document
Any other relevant information	View Document

#### **Institutional Distinctiveness**

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

#### **Response:**

#### Giving Back to society and their Environment

#### **Objectives:**

- To involve students in community development and nation building activities so as to produce culturally conscious citizens with care for the community and concern for the country.
- To promote a strong relationship between the society and the institution.
- To create awareness among the students regarding the social problems and to serve the needs of the communities.
- To develop abilities to enable students to manage programmes for community.

In this wide arena of competition, we would like to enable Engineering aspirants with more calibers and more innovation. This society should sincerely serve the cause of the education needs of the common man of this metropolitan city. This is the message set by **Our Educational Trust Chairman Prof.Dr.A.Kanagaraj** and with this spirit of sincerity, we believe in high standards of academic, professional, and societal performance.

We believe that college life is not all about academics, games, friends, and fun. It is also about learning to interact with other people, being aware of social, environmental and gender issues, and inequities in the society. We provide an opportunity to every student to contribute to make the society in which they live a better place and to grow as better individuals.

The **Jaya Sakthi Engineering College** has committed itself to the task of inculcating social values and responsibilities in its students. In line with its vision of working towards the socio-economic development of the country, the College has taken utmost care to give back to the community. Along with other sports cultural and technical activities, the NSS unit plans activities like tree plantation and field visits to expose the students to the pressing issues in our society. They also interact regularly with the students through open discussions on various topics.

Several activities are undertaken for the students to expose them to the pressing environmental issues that ail us. Students are taken on field visits to related industries and encouraged to participate in competitions dealing with environmental issues. As a special thrust, societal development is also instilled on a large scale into the students through the active NSS unit which undertakes various services to inculcate social values.

Throughout the year, the NSS unit undertakes a plethora of events ranging from street plays, cleanliness drives, tree plantation drives, donation drives, waste management drives, gender equity, field visits and many more. The NSS unit has also been was also a part of the plastic usage reduction drive and successfully implemented in the campus. It emphasized the reduction in use of plastic inside the campus.

The college ensures that the social values and feeling of giving back to the society is not limited to the NSS unit. In addition to the activities by NSS, many students to come up with ideas to contribute to society too, and at our college, we encourage them to go forward by supporting them in executing the ideas.

**Jaya Sakthi Engineering college** has committed itself and taken on priority the task of an inclusive social upliftment and adopted a village Thirur near Sevvapet road, Nadukuthagai just behind Jaya Engineering as the college's social responsibility. We have done temple cleaning, Pond construction, Pond cleaning and renovation. This adaptation incorporates a set of training programs for the targeted youth that are recognized by and are relevant to the requirements of industries.

To begin with, Mobile repair, Electrical fitting, Electrical maintenance and repair, Toilet construction, Embroidery, Candle making, Incense sticks making, paper bag manufacturing, Speed ball making. All the student clubs also do their bit by organizing several charity events under their banners like Mini Marathon for a social cause, stage plays, charity concerts and many other events.

NSS Students a total of 30 members volunteered for Flood relief work where materials were packed and send across to flood affected regions.

The **Jaya Sakthi Engineering college trust** have distributed 220 number of 5 Kgs Rice bags (1100 Kgs) to the poor and needy people oliving in Nadukuthagai, Parevakkam and Balaji Nagar and Ragendra nagar, Thirumullaivoyal through President of the village toward **COVID-19 during the lockdown**. The trust has distributed Groceries and vegetables to the downtrodden people of 50 families.

#### Major Social Services by our trust:

1. Donated Rs.25,00,000/= to the Railway Dept., Govt.of India, for the New Proposal Railway station at Nemilichery.

2.Actively participated in "NNT/SSS" of Tamilnadu Government for the benefit of the public and contributed Rs.36,50,000/=

3. Donated Rs.5,00,000/= to the Prime Minister's Flood Relief Fund.

4. Donated Rs.1,25,000/= to the Tamilnadu Government for Tsunami Relief.

5. Donated Rs.2,00,000/= for award of "PORKIZHI" in Thiruvallur Dist..

6. Donated Rs.2,00,000/= in Chief Minister, Tamilnadu Government for Corona(CIVID 19) Relief.

7. Donated Rs.41,021/- as examination fees to for prisoners in Central Jail, Puzhal

8. Donated Rs.100,000/- to Jaya TV to conduct the programme "Education for all "

9. Provided free computer training programme for Tamilnadu Police officials for twice.

10. Provided free computer training programme for Judicials in District level

11. Donated computer system to the Government school at Kolappanchery, Poonamalle taluk, Chennai.

12. Actively participated in "ANNADHANAM" scheme of Tamilnadu Government for the benefit of the public.

13. Distributed free food packets to the poor and needy people during Vardha cyclone.

14. Donated Rs.25000/- to Tamil Sangham, NewDelhi. This list continues in pages but due to restriction of words, we are forced to show only a very few.

At our college, every student, as individuals and together with faculty members takes part in this **endless experience of giving back to the society**, and to transform it to make it a better place. Without volunteers, many of the services and events we enjoy in our society would not be so readily available. Spending time helping out at local villages provides an important service to less fortunate neighbours. Giving back to the place you call home helps to unite the society and bridge some of the social and economic gaps.

File Description	Document	
Appropriate web in the Institutional website	View Document	

# 5. CONCLUSION

## **Additional Information :**

Jaya Sakthi Engineering College is preparing young minds with such skills. We desire to assist Engineering aspirants with higher levels of ability and more innovation in this vast arena of competition. This association should honestly serve the cause of the common man's education requirements in this rural area. We consider that college life is more than just academics, games, friends, and having a good time. It is also about learning to communicate with others, becoming conscious of social, environmental, and gender concerns, as well as societal imbalances.

## **Concluding Remarks :**

Jaya Sakthi Engineering College focuses on instilling morality and social responsibility in all of its students. In accordance with its quest to aid in the socio economic development of the country, the Jaya Sakthi Engineering College has made every effort to give back to the community. The Jaya Sakthi Engineering College also hosts numerous sporting, cultural, and technical activities. In addition to that, our NSS/YRC/RRC students have Voluntarily served the common people during natural and man made calamities. We give our students necessary training so they can grow in their sense of moral and social responsibility. Jaya Sakthi Engineering College is very much focussed on Outcome Based education and Quality.