

### YEARLY STATUS REPORT - 2020-2021

Par	rt A	
Data of the Institution		
1.Name of the Institution	ST. JOSEPH'S COLLEGE OF ENGINEERING	
Name of the Head of the institution	SESHAGIRI RAO VADDI	
• Designation	Principal	
• Does the institution function from its own campus?	Yes	
• Phone no./Alternate phone no.	04424503237	
Mobile no	9444069916	
Registered e-mail	principal@stjosephs.ac.in	
Alternate e-mail	raosvaddi@gmail.com	
• Address	OLD MAMMALLAPURAM ROAD, CHENNAI-119	
• City/Town	CHENNAI	
• State/UT	Tamil Nadu	
• Pin Code	600119	
2.Institutional status		
Affiliated /Constituent	Affiliated	
• Type of Institution	Co-education	
• Location	Urban	

Financial Status	Self-financing
Name of the Affiliating University	Anna University
Name of the IQAC Coordinator	Dr.N.Arunkumar
Phone No.	04424501060
Alternate phone No.	9444768201
Mobile	9840009626
IQAC e-mail address	iqac@stjosephs.ac.in
Alternate Email address	hodmechstudentaffairs@stjosephs.ac.in
3.Website address (Web link of the AQAR (Previous Academic Year)	https://stjosephs.ac.in/NAAC/AQAR %202019-2020.pdf
4. Whether Academic Calendar prepared during the year?	Yes
• if yes, whether it is uploaded in the Institutional website Web link:	https://stjosephs.ac.in/NAAC/Academic%20schedule%202020-21.pdf

### **5.Accreditation Details**

Cycle	Grade	CGPA	Year of Accreditation	Validity from	Validity to
Cycle 1	A+	3.46	2019	09/08/2019	08/08/2024

### 6.Date of Establishment of IQAC 17/09/2018

7.Provide the list of funds by Central / State Government UGC/CSIR/DBT/ICMR/TEQIP/World Bank/CPE of UGC etc.,

Institutional/Depa rtment /Faculty	Scheme	Funding Agency		Year of award with duration	Amount
Dr. A. Chandrasekar Computer Science and Engineering	MODROBS	AICTE Del	, New Lhi	2020 (365 days)	8,36,392
Dr.Jayasree Krishnan Dr. U. Abirami MBA Department	Major Research Scheme	ICSSR Del	, New Lhi	2021 (180 days)	81,250
Dr.D. Joel Jebadurai MBA Department	Institute for Excellence in humanities and social sciences.	ICSSR Del	, New	2021 (730 days)	2,64,000
8.Whether compositions NAAC guidelines	ition of IQAC as pe	r latest	Yes		
• Upload latest IQAC	notification of format	ion of	View File	2	
9.No. of IQAC mee	tings held during th	ne year	2		
• Were the minutes of IQAC meeting(s) and compliance to the decisions have been uploaded on the institutional website?		Yes			
If No, please upload the minutes of the meeting(s) and Action Taken Report		No File U	Jploaded		
10.Whether IQAC received funding from any of the funding agency to support its activities during the year?		No			
• If yes, mention	on the amount				

### 11. Significant contributions made by IQAC during the current year (maximum five bullets)

IQAC of St. Joseph's College of Engineering has been actively involved in maintaining quality within the institution through Ranking(NIRF Participation), AQAR Submission and Administrative Audits of all departments of Institution and its Followup action

Feedback from stakeholders and its Analysis to improve Teaching Learning process

Increased participation of Student project awards and Institutional awards

Value added courses Pre-placement training programmes were conducted to enhance the level of placement.

Collaborative interactions with industries through industrial projects, industrial visits inplant trainings and internships. Publishing Students innovative research ideas in reputed journals.

12.Plan of action chalked out by the IQAC in the beginning of the Academic year towards Quality Enhancement and the outcome achieved by the end of the Academic year

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Plan of Action	Achievements/Outcomes
Funds received from funding agency	3 projects worth of Rs11,81,642/- is undergoing in college
Patents Awarded by IPR	Three awards attained from IPR-INDIA(one for patent and one for software Copyright and one for design)
Journal Publications	More focus on scopus journal publications 91 publications in this current Academic Year
Academic Council and BoS	Approval of Autonomous Regulations and framing new syllabus for the students enrolling from the year 2021.
Academic and Administrative Audits	Assessing Teaching learning process based on curriculum planning and to meet learning objectives.
NIRF Registration	Data collection and updating the institute details for NIRF ranking
Orientation Programmes	Orientation programme for first year students which helps the students to get acclimatised with campus life, curriculum and administrative procedures
13.Whether the AQAR was placed before statutory body?	Yes

### Name of the statutory body

Name	Date of meeting(s)
Coverning Council	05/08/2021

### 14. Whether institutional data submitted to AISHE

Year	Date of Submis	sion		
2021		04/01/2022		
Extended Profile				
1.Programme				
1.1 Number of courses offered by the institution a programs during the year	cross all	17		
File Description Data Template	Documents	<u>View File</u>		
2.Student		est.		
2.1 Number of students during the year		5077		
File Description Institutional Data in Prescribed Format	Documents	<u>View File</u>		
2.2 Number of seats earmarked for reserved category as per GOI/ State Govt. rule during the year		296		
File Description Data Template	Documents	<u>View File</u>		
2.3 Number of outgoing/ final year students during	g the year	1416		
File Description Data Template	Documents	<u>View File</u>		
3.Academic				
3.1 Number of full time teachers during the year		302		
File Description Data Template	Documents	<u>View File</u>		
3.2 Number of sanctioned posts during the year		296		
File Description Data Template	Documents	<u>View File</u>		
4.Institution				
4.1 Total number of Classrooms and Seminar halls		147		
4.2 Total expenditure excluding salary during the year (INR in lakhs)		82.202697		
4.3 Total number of computers on campus for academic purposes		1614		

### Part B

#### **CURRICULAR ASPECTS**

### 1.1 - Curricular Planning and Implementation

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

Effective curriculum delivery is carried out in the Institution through a well-documented approach.

- In accordance with academic schedules given by the university an Academic Calendar encompassing working days schedule, internal assessment examinations, guest lectures, Industrial visits value added courses etc., is prepared every semester.
- Allocation of subjects to the faculty members is done after careful consideration of their subject expertise besides their choice
- Course study material such as lecture notes, question bank, lab manuals are prepared by the allotted faculty members focusing on the outcome based education and Bloom's Taxonomy. These materials are uploaded in the students' portal for their reference. The details of uploading are recorded by the departments and periodically monitored by the Principal.
- Time tables are prepared in advance every semester for theory, tutorial and practical classes based on the, credits as per the curriculum.
- A Comprehensive lesson plan showing the hourly plan of course delivery is prepared for all the subjects by the allotted faculty members.
- The quality of course delivery by the faculty members are periodically monitored through Class Monitoring Committee (CMC) by getting feedback from the students. Any deviations from the lesson plan reported by the students are well addressed by the Head of the Department suitably. A similar procedure is followed for practical classes too.
- Special classes are arranged in the event of any loss of working days or in cases students requiring more practice.
- In order to complement the class room lectures, NPTEL (National Programme on Technology Enhanced Learning) Video lecture sessions relevant to the subjects are arranged periodically for the students.
- In the past five years, 431 Guest lecture on topics covering recent trends were arranged with experts drawn from academia and industry, additional courses related to the subjects are conducted to the students to facilitate hands on experience on

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- concepts learnt in the class room sessions.
- To supplement the curricular gaps and to prepare them for the relevant industry "value added courses" are conducted with the help of industry experts.
- Effectiveness of course delivery is ascertained also through the performance of students in unit wise internal Assessment examinations besides a comprehensive model examination.
- After each internal assessment examination, a periodic meeting is conducted in the Department with the faculty members to assess the level of understanding of the students on the topics covered.
- Special coaching is provided for the slow learners identified through the above process.
- These steps are followed periodically during every semester to ensure an effective curriculum delivery.

File Description	Documents
Upload relevant supporting document	<u>View File</u>
Link for Additional information	
	https://stjosephs.ac.in/NAAC/AQAR%202020-202
	1/1.1.1%20upload%20log%20book_link%20to%20be
	<u>%20created.pdf</u>

# 1.1.2 - The institution adheres to the academic calendar including for the conduct of Continuous Internal Evaluation (CIE)

The institution prepares schedule for every semester well in advance including continuous internal assessment in coherence with the affiliated university. The mark entry post internal assesment is entered in university portal as per the schedule. The internal assessment procedure is listed as follows:

#### Internal Assessment Mechanism

- A Centralized Examination Process is being practiced for all years.
- Assessment schedule is prepared well in advance for every semester and included in academic calendar.
- Automatic generation of Question Paper
- Re-examinations conducted for Genuine Absentees.
- 4 Internal assessment Examination IAE (each for 50 marks)

with individual units as portions of each course is conducted. Before the university examination, a model examination (100 marks) for the complete syllabus is being steered. As per university guidelines, the marks of first and second IAE are considered for first cycle entry. 3rd and 4th assessment are considered for 2nd cycle entry of internal marks. Model exam marks are included for internal evaluation in last cycle.

Marks secured by students in all these 5 examinations are converted to 20 marks which are provided as internal marks.

#### Procedure of the Evaluation Process

- Central valuation monitored by Head of the Department
- Uploading Answer Keys in student portal
- Online Mark Entry & Results Analysis.
- Display of Internal assessment marks in department notice board & web portal
- Communicating Results to the parents through SMS

#### End Semester examination by ANNA UNIVERSITY

- End Semester Exams Timetable will be notified by Anna University
- Question paper generation and valuation carried out by Anna University
- End semester Exam is conducted for 100 marks. Each student should secure 45 marks out of 100 in each course of external assessment to clear the course apart from Internal Assessment examination. The secured marks are converted to 80 marks and further added with the marks secured in IAE. Final grade for a course is calculated by accounting both internal and external marks for 20 and 80 marks respectively.
- Discrepancies in the University Question paper (if any) are communicated to University.
- Students can get the photocopies of their evaluated answer sheets from university.
- Students can apply for revaluation.
- Students can apply for review of their answer sheets if further needed.

The procedure is carried as per the guidlines of the university and the relevant documents are provided in additional documents.

File Description	Documents
Upload relevant supporting document	<u>View File</u>
Link for Additional information	https://stjosephs.ac.in/NAAC/AQAR%202020-202 1/1.1.2.pdf

1.1.3 - Teachers of the Institution participate in A. All of the above following activities related to curriculum development and assessment of the affiliating University and/are represented on the following academic bodies during the year.

Academic council/BoS of Affiliating University Setting of question papers for UG/PG programs Design and Development of Curriculum for Add on/ certificate/ Diploma Courses Assessment /evaluation process of the affiliating University

File Description	Documents
Details of participation of teachers in various bodies/activities provided as a response to the metric	<u>View File</u>
Any additional information	<u>View File</u>

### 1.2 - Academic Flexibility

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

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

16

File Description	Documents
Any additional information	<u>View File</u>
Minutes of relevant Academic Council/ BOS meetings	<u>View File</u>
Institutional data in prescribed format (Data Template)	<u>View File</u>

### 1.2.2 - Number of Add on /Certificate programs offered during the year

### 1.2.2.1 - How many Add on /Certificate programs are added during the year. Data requirement for year: (As per Data Template)

18

File Description	Documents
Any additional information	No File Uploaded
Brochure or any other document relating to Add on /Certificate programs	<u>View File</u>
List of Add on /Certificate programs (Data Template )	<u>View File</u>

### 1.2.3 - Number of students enrolled in Certificate/ Add-on programs as against the total number of students during the year

#### 1195

File Description	Documents
Any additional information	<u>View File</u>
Details of the students enrolled in Subjects related to certificate/Add-on programs	<u>View File</u>

#### 1.3 - Curriculum Enrichment

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

The Institution, has taken up many initiatives over the years which have provided a platform for holistic development ensuring sensitiveness, towards the society.

Environment and Sustainability

- The curriculum includes a subject "Environmental Sciences and Engineering - GE 8291". Most of the engineering streams choose this elective.
- Short term courses that enhance and inculcate remedial practices for issues on environment and sustainability are conducted.
  - Value added Course Wake up call for Solar industry
  - Two Days Workshop: Solar Grid System Design And Sizing
     Of Essential Component's & Scope For Entrepreneurship
  - Webinar on "Solar and Renewable Energy"

- Webinar on "Electrical Vehicles charging"
- Guest lecture on Disaster Management

0

- A paper less environment is encouraged. Usage of the college web portal is preferred.
- The ECO-SOC club was started in 2014 with the main objective of reaching and educating the students about the social, economic and political issues and to motivate quality leaders.
  - Entrepreneur Development cell, Google groups, Quiz club, Tamil Club, Maths club, and English clubfunction wherein activities are organized to develop their creativity, diverse competence and self-confidence.

Gender Sensitization.

The college which is a co-educational institute sensitizes its staff and students on issues

like gender sensitization and women empowerment.

- Gender equality is maintained at every point. In some streams the ratio of girls is above.
- All girls teams exist, they go out to participate in various competitions and have brought laurels.
- Women's Day is celebrated with enlightening lectures and activities.
- Webinar -"IMPORTANCE OF WOMEN IN ENGINEERING"
- A vibrant IEEE society for "Women in Engineering", functions where activities for women engineers is organized since 2015.
- International Webinar Series for 12 days was organized by the department of EEE with eminent speakers from across the globe
- Awareness Program: "Health Awareness for Women"
- Webinar series on "The female voice at workforce"

#### Professional Ethics

- The university curriculum includes an elective subject titled "Professional Ethics in Engineering GE8076". Most of the engineering streams choose this elective.
- Professional ethics is imbibed into the student community by the strict regime of discipline that is maintained within the campus. Cheating is strictly curbed, and severe measures are taken up. Punctuality is prioritized.

#### Human Values

- Student visit 90 NGO homes, which includes 75orphanages, 10 old age homes and Cerebral palsy (CP) children's homes. The students willingly provide for several basic needs of the inmates. Lunch is served to all the inmates and the students join them and create a feeling of being loved and cared. The students also learn to realize the needs of the inmates. This creates a feeling of empathy with the under privileged of the society.
- A dynamic NSS unit which has a yearly membership of 100 students functions. Every year a village is chosen and the volunteers spend a week doing whatever is the major requirement at that place. They co - ordinate with the teachers to arrange for special tuitions, this has improved the performance of the students.
- An active YRC unit exists. Volunteers help in arranging blood donation camps and regularly help the needful.
- During the pandemic various programs were conducted to spread awareness and encouragement
  - Webinar on "Embracing conflicts in the challenging world"
  - Webinar on "Innovation in technology during Covid times"
  - Webinar on "Living with Covid Mutual existence Way forward"
  - Webinar on "Believe in Yourself and Your Ability"

Every student of the campus blooms with several values embedded, to help them mature as responsible and socially concerned citizens of the human society at large.

File Description	Documents
Any additional information	No File Uploaded
Upload the list and description of courses which address the Professional Ethics, Gender, Human Values, Environment and Sustainability into the Curriculum.	<u>View File</u>

# 1.3.2 - Number of courses that include experiential learning through project work/field work/internship during the year

### 25

File Description	Documents
Any additional information	No File Uploaded
Programme / Curriculum/ Syllabus of the courses	<u>View File</u>
Minutes of the Boards of Studies/ Academic Council meetings with approvals for these courses	<u>View File</u>
MoU's with relevant organizations for these courses, if any	<u>View File</u>
Institutional Data in Prescribed Format	<u>View File</u>

### 1.3.3 - Number of students undertaking project work/field work/ internships

### 986

File Description	Documents
Any additional information	<u>View File</u>
List of programmes and number of students undertaking project work/field work//internships (Data Template)	<u>View File</u>

### 1.4 - Feedback System

# 1.4.1 - Institution obtains feedback on the syllabus and its transaction at the institution from the following stakeholders Students Teachers Employers Alumni

### A. All of the above

File Description	Documents
URL for stakeholder feedback report	https://stjosephs.ac.in/NAAC/EEE%202020-2021 _pdf
Action taken report of the Institution on feedback report as stated in the minutes of the Governing Council, Syndicate, Board of Management	<u>View File</u>
Any additional information	No File Uploaded

### 1.4.2 - Feedback process of the Institution may A. Feedback collected, analyzed be classified as follows

and action taken and feedback available on website

File Description	Documents
Upload any additional information	No File Uploaded
URL for feedback report	https://stjosephs.ac.in/NAAC/EEE%202020-2021 _pdf

### TEACHING-LEARNING AND EVALUATION

### 2.1 - Student Enrollment and Profile

### 2.1.1 - Enrolment Number Number of students admitted during the year

1232

### 2.1.1.1 - Number of students admitted during the year

1232

File Description	Documents
Any additional information	<u>View File</u>
Institutional data in prescribed format	<u>View File</u>

### 2.1.2 - Number of seats filled against seats reserved for various categories (SC, ST, OBC, Divyangjan, etc. as per applicable reservation policy during the year (exclusive of supernumerary seats)

### 2.1.2.1 - Number of actual students admitted from the reserved categories during the year

#### 296

File Description	Documents
Any additional information	<u>View File</u>
Number of seats filled against seats reserved (Data Template)	<u>View File</u>

### 2.2 - Catering to Student Diversity

2.2.1 - The institution assesses the learning levels of the students and organizes special Programmes for advanced learners and slow learners

To start with their academics, they are initially provided with Bridge courses to freshen up the concepts in Physics, Chemistry and Mathematics. Special Computer Programming courses are given for students particularly from Biology group during their higher secondary education to cope up with the programming and software related courses in the upcoming semesters. To overcome all disputes and barriers in communication, communication skills course is given at the start of first year itself.

Initially all the coaching classes are given common to all the students. After being monitored in terms of performances in their Internal Assessment Examinations, Model Exam and First Semester University Examinations, they are categorized as advanced learners and slow learners.

When it comes to the lateral entry students, they have patch up courses for all the subjects in third semester and particularly Mathematics coaching classes as they are deficient in concepts of Engineering Mathematics - I and Engineering Mathematics - II.

Apart from regular classes the slow learners are given additional coaching during exams and special coaching during their semester study holidays for courses including their lower semester arrear courses.

Adding to these regular practices, we have a system called mentoring, where each faculty is attached with some 10-15 students, who maintains a record of those students performance in their Examinations along with biodata and continuously monitors them and keep track of their growth. More than mentors, we also have Domain in-charges for Advanced, Average and Slow Learners who are the motivational vibes such that the slow learners are motivated to shine in academics and get through without any back logs; the

average learners are motivated to score higher grades; the advanced learners are motivated to get University Ranks and think beyond their curriculum.

We also have semester starting meeting for every semester called orientation program explaining the semester's need, expectation and various training programs and courses involved in that semester. At the Closing of the semester, HOD along with the Advisory Board Members meet the students motivate them for their University Examinations.

For the advanced learners, Student clubs, Student chapters like IEEE with 500 members and societies like Computer society, OSA, Robotics and automation society, Power electronics society and various others, enable students to innovate and participate in various competitive events. Competent students are fully sponsored to carry out innovative socially relevant projects in competitions like Hackathan (5 problems are addressed and selected in AICTE - MHRD officials as One among 330 International students from 10 different ASEAN countries ), INAE (2 awards received), Coaching classes for competitive exams such as GATE, GRE, TOEFL, CAT, Defense and Civil service Examinations are provided during the this year(109 / 197 Students are cleared Competitive exams). They undertake special placement drive training by recruiters themselves and other leading training organizations every year. Workshops on real-time concepts are conducted as per their interest and need. In addition Seminars and guest lectures are conducted regularly in their concern field of interest, equipping them with sound knowledge and keep in track of the trend in technology.

File Description	Documents
Paste link for additional information	https://stjosephs.ac.in/NAAC/AQAR%202020-202 1/2.3.1.xlsx
Upload any additional information	<u>View File</u>

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

Number of Students	Number of Teachers
5077	302

File Description	Documents
Any additional information	<u>View File</u>

### 2.3 - Teaching- Learning Process

2.3.1 - Student centric methods, such as experiential learning, participative learning and problem solving methodologies are used for enhancing learning experiences

Our institution takes efforts to make teaching learning process students centric by adopting various suitable learning methodologies. Students are made to have experiential learning partly through curriculum itself by imparting practical sessions in laboratory courses besides end semester project work. Apart from this, students are encouraged to make models to consolidate their learning in the class room. Students in pre-final year made to carry out mini-projects to have more experiential learning.

In addition value added courses are arranged with industrial experts to give hands on exposure to the latest technologies. Every semester students are taken for Industrial visits in the relevant companies to gain exposure to industrial practices. Student centric participative learning methods include presentation of Technical seminars by students on topics related to curricula and working towards innovative project awards at State and National level. Projects carried out by the students are scrutinized at department level and shortlisted to be nominated for best project awards. In addition to this students involve themselves in making working models and exhibits to be showcased during inter-collegiate symposia.

Our institution has student's chapters namely SAE, ISHARE, ASHRAE, IEEE, ISTE, OSA, BRSI, ICI, CSI and IWS with 13 professional societies which facilitate students to participate in project contest involving hands on learning. Tutorial classes form part of the course delivery to inculcate problem solving skills among the students to supplement regular teaching learning process. Laboratories are well equipped with internet facility which enables students to self-learn and widen their learning skills through problem solving. The problem solving ability is further honed by incorporating questions on case studies in the internal assessment examinations.

In addition students participate in National level competitions such as Smart India Hackathon contest where 5 problems are addressed and selected in AICTE - MHRD officials as One among 330 International students from 10 different ASEAN countries, AICTE Chathra Viswakarma

awards (2 awards), DRDO, MSME certified trainings, various competitions conducted by companies Titan, Nokia, Cognizant, Amazon, etc. The students register for online NPTEL Certificate courses (around 1000 students are registered), Coursera (380 Students) so that they can gain knowledge in addition to their regular curriculum. Students are also encouraged to do coding

File Description	Documents
Upload any additional information	<u>View File</u>
Link for additional information	
	https://stjosephs.ac.in/NAAC/AQAR%202020-202
	<u>1/2.2.1.xlsx</u>

### 2.3.2 - Teachers use ICT enabled tools for effective teaching-learning process. Write description in maximum of 200 words

The applicability and adoptability of innovative and creative methods of Teaching-Learning process has high potential value in improving education, empowering employability and achieving goals of human that contribute to the nation development. Apart from the conventional method of teaching which includes 'chalk and talk', the current and next generation students expect innovative methods of teaching such as multimedia learning process, problem based learning and usage of various multimedia tools for better understanding.

The innovative and creative method of teaching processes highly focuses on attaining the course outcomes and to surge, the students in the right direction to empower themselves and the nation. Various supplemental teaching-learning methods such as smart classes, demonstration classes, PowerPoint presentations, etc., has been utilized along with the regular teaching-learning practice to develop the critical and analytical ability of the students.

Model and Chart presentations are encouraged to enhance the basic understanding of the students in the particular discipline/field area. The contribution of each student is motivated to improve rational interpretations. The students are encouraged to participate as well as to organize various workshops, conferences, and technical symposiums to extend their knowledge and to impart the leadership qualities in the students. Soft skill training and communication proficiency tests are regularly conducted during odd and even semesters to improve the analytical and reasoning efficiency of the students.

Over 300 Guest lecturers / invited speech are organized to extend the student's knowledge beyond the curriculum. Demo classes and practical oriented classes/hands on training are arranged to strengthen the practical knowledge of the students along with the theoretical knowledge. Other teaching-learning methods such as Group discussions, Jigsaw discussions and Debates are conducted to actively engage the students to analyse the pros and cons of every field of study. Role plays on divergent techniques or process are reproduced by the students on the verge to explore every segment in the techniques/process. Elearning and self- learning process is encouraged within the student group, apart from the other technical methods to develop the self- analysis during the study.

More than 300 subjects of NPTEL lecture notes & videos, 56 technical magazines and 600 online journals are made available to the student society to understand and enlarge their ideas towards the current technical and global affairs. The students are also allowed to carry out mini- and major projects as a part of their academic activities. The students are supported to develop innovative as well as creative materials for the global economy need.

An average of 30 industrial visits per semester is arranged and 175 value added courses are arranged during last five years for the students to extend their knowledge towards the technological activities carried out within the industries. Two-way conversations are preferred to build the students teacher relationship to enhance active learning process.

File Description	Documents
Upload any additional information	No File Uploaded
Provide link for webpage describing the ICT enabled tools for effective teaching-learning process	<u>View File</u>

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

#### 2.3.3.1 - Number of mentors

302

File Description	Documents
Upload, number of students enrolled and full time teachers on roll	<u>View File</u>
Circulars pertaining to assigning mentors to mentees	<u>View File</u>
Mentor/mentee ratio	<u>View File</u>

### 2.4 - Teacher Profile and Quality

### 2.4.1 - Number of full time teachers against sanctioned posts during the year

302

File Description	Documents
Full time teachers and sanctioned posts for year (Data Template)	<u>View File</u>
Any additional information	<u>View File</u>
List of the faculty members authenticated by the Head of HEI	<u>View File</u>

# 2.4.2 - Number of full time teachers with Ph. D. / D.M. / M.Ch. /D.N.B Superspeciality / D.Sc. / D.Litt. during the year (consider only highest degree for count)

### 2.4.2.1 - Number of full time teachers with Ph. D. / D.M. / M.Ch. /D.N.C Superspeciality / D.Sc. / D.Litt. during the year

147

File Description	Documents
Any additional information	<u>View File</u>
List of number of full time teachers with Ph. D. / D.M. / M.Ch./ D.N.B Super specialty / D.Sc. / D.Litt. and number of full time teachers for year (Data Template)	<u>View File</u>

# 2.4.3 - Number of years of teaching experience of full time teachers in the same institution (Data for the latest completed academic year)

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

3241.7

File Description	Documents
Any additional information	<u>View File</u>
List of Teachers including their PAN, designation, dept. and experience details(Data Template)	<u>View File</u>

#### 2.5 - Evaluation Process and Reforms

2.5.1 - Mechanism of internal assessment is transparent and robust in terms of frequency and mode. Write description within 200 words.

The continuous internal assessment system followed in our institution covers the aspects of cognitive learning, demonstrative skills besides attendance criterion. Students are informed about the parameters of internal assessment system well in advance.

The performance of students in the theory subjects is assessed periodically as follows for internal assessment:

Period	Portions of the	Method of	Maximum Marks
	Subjects	Evaluation	
Assessment Period -	Unit I & II	Internal	100
Ι		Examination	
Assessment Period -	Unit III & IV		100
II		Assignment	
		Seminar	
Assessment Period -	All Units (I - V)	Internal	100
III		Examination	

The total marks obtained in all assessment examinations are put together out of 300, is proportionately converted to 20 marks and rounded to the nearest integer.

Assignments / Seminar Topics are given to be completed for each subject in turn once in a week. The seminar presentations by the students are aimed at improving communication, presentation and technical skills of the students.

For practical subjects, the performance of students is assessed periodically as follows:

Parameters /	Type	of	Evaluation	Maximum	Marks

Observation, Procedure, Design,	10
Calculation and Presentation of Results	
& Graphs	
Viva-voce at the end of each experiment	
Dogularity of Cubmission of Dogond of	
Regularity of Submission of Record of	
work	
Model Practical Examination	10
Total Internal Assessment Marks	20

For Project Work, the performance of students is assessed periodically as follows:

Type of Evaluation	Parameters for Evaluation	Maximum Marks
Project Review - I	Problem Definition,	10
	Literature Review,	
	Methodology	
Project Review - II	Extent of Simulation /	
	Experimental work carried	
	out	
Project Review - III	Presentation of Results &	
	Conclusions	
Project Review - IV	Demonstration of Project	
	Outcomes	
Model Viva-Voce - I	Draft Report Submission	10
Model Viva-Voce - II	Final Beneat Cubmission	
Moder viva-voce - II	Final Report Submission	
Total Internal Assessment 1	20	

Once the examinations are conducted, the answer scripts of students are evaluated centrally, verified by the senior faculty to ensure transparency and distributed back to the students by the teachers within two days of examination. The faculty members discuss with the students the solutions to the all questions given in the examinations during the distribution of answer papers to help them understand their mistakes and note down the corrections. Thus the students are allowed to assess their own work and any modifications, if necessary in the award of marks are carried out. Suggestions are given to the students who need to improve and the ones who performed well are appreciated

File Description	Documents
Any additional information	<u>View File</u>
Link for additional information	
	https://stjosephs.ac.in/NAAC/AQAR%202020-202 1/2.5.1.pdf

### 2.5.2 - Mechanism to deal with internal examination related grievances is transparent, time-bound and efficient

- Internal assessment examinations are conducted as per the academic calendar provided by the Institution. The Examination office prepares a timetable according to the academic calendar provided by the Institution and the examination office showcases it much prior to the commencement of exams which is mailed to both the staff and students.
- Every grievance at Institution level is clarified instantly.
   The institution continuously reviews the evaluation process done internally and implements the necessary changes as and when applicable/ required.
- The College has created a grievances redressal committee comprising of heads of the department for the academic Redressal of students' grievances.
- Internal assessment question paper feedback is given by the concerned subject teacher on the day of assessment before the examination for discrepancies and the answer Key is uploaded in the portal.
- To ensure timely needs of students during assessment examinations, frequent visits are made by the Controller of Examinations and various department HoDs. Scrutiny of answer scripts is done by the senior faculty and HOD to ensure fairness and transparency of the correction.
- Answer scripts are evaluated and distributed to the students within two days from the date of examination.
- Assessment marks are entered into the portal after the exams and the entries are cross verified by the other department faculties for corrections.
- The end semester examinations are conducted and controlled by the University and if students have any problem, the Principal communicates to the Controller of Exams of the University about the grievances of the students.
- The grievances of the students in external examination at university level are addressed through a proper channel by obtaining photocopies of the evaluated answer scripts, reevaluation and challenge evaluation by paying a prescribed

- university fee.
- University Question paper feedback is given to the University through proper channel, for the out of syllabus questions and discrepancies by the concerned faculty members

File Description	Documents
Any additional information	<u>View File</u>
Link for additional information	
	https://stjosephs.ac.in/NAAC/AQAR%202020-202
	<u>1/2.5.2.pdf</u>

### 2.6 - Student Performance and Learning Outcomes

2.6.1 - Programme and course outcomes for all Programmes offered by the institution are stated and displayed on website and communicated to teachers and students.

St Joseph's College of Engineering offers 11 Under Graduate Programmes, 7 Post Graduate Programmes. Programmes offered are listed below:

#### **UG PROGRAMMES**

- 1.B.E. Computer Science and Engineering
- 2. B.E. Electronics and Communication Engineering
- 3. B.E. Mechanical Engineering
- 4. B.E. Electronics and Instrumentation Engineering
- 5. B.E. Electrical and Electronics Engineering
- 6. B.E. Civil Engineering
- 7. B.Tech. Information Technology
- 8. B.Tech. Biotechnology
- 9. B.Tech. Chemical Engineering
- 10.B.Tech. Artificial Intelligence and Data Science
- 11. B.Tech. Artificial Intelligence and Machine Learning

#### PG PROGRAMMES

- 1. M.E. Power Electronics and Drives
- 2. M.E. Computer Science and Engineering
- 3. M.E. Applied Electronics
- 4. M.E. Manufacturing Engineering
- 5. M.E. Embedded Systems
- 6. M. Tech. Biotechnology
- 7. M.B.A Master of Business Administration
- 8. M.B.A. Master of Business Administration (Integrated 5 Yrs)

#### DISSEMINATION

The programme outcomes, programme specific outcomes and course outcomes of all the programmes are disseminated through following modes

- College website
- Department link of College website
- Orientation programs
- Display boards
- Department magazines
- HOD room
- Department notice boards
- Class rooms
- Faculty rooms
- Laboratories
- Among stakeholders through e-mails transactions
- Various functions such as:
- 1. Alumni meet
- 2. National and International conferences
- 3. Seminars
- 4. Workshops
- 5. Faculty Development Programs

### Dissemination of CO, PO & PSO of the Department

S.No	Dissemination					
	То	Ву	Content	Mode / Even		
1.	Students	Head of the Department	Course outcomes	1) Opening		
			Programme Outcomes	2) Departme		
			Programme Specific Outcomes	3) Lab Manu		
				Questic		
2	Parent	Head of the Department	Course outcomes	1) Orientat		
			Programme Outcomes	2) Departme		
			Programme Specific Outcomes	3) Result C		
				4) Departme		
				Magazi		
3	Faculty members of	Course	Course outcomes	1) Opening		
	the Department	Coordinator	Programme Outcomes	Meetin		
	& Service Departments		Programme Specific Outcomes	Academ		
				2) Departme		
				3) Course I		
				4) Academic		
4	External Stake	HOD	Course outcomes	1) College		
	Holders	Placement Officer	Programme Outcomes	2) News Let		
			Programme Specific Outcomes	3) Placemen		

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for Additional information	https://stjosephs.ac.in/department.html
Upload COs for all Programmes (exemplars from Glossary)	<u>View File</u>

2.6.2 - Attainment of Programme outcomes and course outcomes are evaluated by the institution.

Method of measuring attainment of POs , PSOs and COs

The effectiveness of the course outcomes have been justified with the help of Performances made by the student in Internal Assessment and End Semester University examination. The Internal Assessment includes Assessment Examination and Assignments. The end semester examination will be conducted by the university. As per Anna university regulations, the final grade of the course will be calculated considering, 20% weightage for Internal Assessment and 80% weightage for end semester performance.

#### 1. Direct Assessment Process

### 1.1 Internal Assessmentfor Theory course

#### (a) Assessments

In a semester three Assessments will be conducted

- Assessment I Units I & II (CO1 & CO2 Each 50 marks)
- Assessment II Units III & IV(CO3 & CO4 Each 50 marks)
- Assessment III All 5units (CO1, CO2, CO3, CO4 & CO5 Each 20 marks)

#### (b) Assignments

The students are asked to prepare and submit assignments, prior to Assessments. The assignment shall contain Key points, Neat diagrams, Derivations and Tables or plots.

S.No	Assessment	Marks	Weightage
1	Assessments	100*3	300
2	Assignments	60+60+80	200
Total			50
			converted to 100

### (c) End Semester University examination:

The University exams are conducted by the Anna University for 100 marks as per the format given below:

Part - A (2 mark Questions)

10 \* 2 = 20

Part - B (13 Mark Questions)

5 \* 13 = 65

Part - C (15 Mark Questions)

includes Application/Design/Analysis/Evaluation/Creativity questions

1 \* 15 = 15

Total = 20 + 65 + 15 = 100 marks

### 1.2. Assessment Process for Practical Courses:

Assessment	Assessment Period	Assessed By	Reviewed By
Method			
Evaluation of	Once per Experiment	Respective	HOD
all the		Faculty Member	
experiments			
Model Exam	Once per Semester		
Additional	Depends upon the course		
Experiments /			
Mini Projects			
University	Once per Semester	External	Anna University
Examination		Examiners	

### 1.3 Project Work

- The students are permitted to carry out their projects either in-house or in an Industrial / Research Organization, on the recommendations of the Head the Department.
- There shall be three reviews during the semester by the review committee which are continuously assessed. The project work shall be evaluated at the end of the semester by an internal and university appointed external examiners.

### 2. Indirect Assessment tools

- Alumni Survey
- Student Feedback
- Parent Feedback

- Student Entry survey
- Student Exit survey
- Industry feedback

SAMPLE ATTAINMENT (Department of Electrical and Electronics Engineering)

#### Level of Attainment:

Target has been arrived based on the average percentage of students scored more than the class average marks in the previous three academic years

Target vs Attainment level for Direct Assessment

% of students so	coring above the class a	verage mark in the D:	irect assessmen
Target	Attainment	Attainment	
	Level 1	Level 2	Level 3
	Above - Less than	Above - Less than	Above
55	45-50	50-55	55
60	50-55	55-60	60
65	45-55	55-65	65
70	50-60	60-70	70
75	55-65	65-75	75
80	50-65	65-80	80

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for Additional information	https://stjosephs.ac.in/NAAC/AQAR%202020-202 1/2.6.2.xlsx

### 2.6.3 - Pass percentage of Students during the year

# 2.6.3.1 - Total number of final year students who passed the university examination during the year

1427

File Description	Documents
Upload list of Programmes and number of students passed and appeared in the final year examination (Data Template)	<u>View File</u>
Upload any additional information	<u>View File</u>
Paste link for the annual report	https://stjosephs.ac.in/IQAC/Annual%20Report %202020-21%20final.pdf

### 2.7 - Student Satisfaction Survey

2.7.1 - Student Satisfaction Survey (SSS) on overall institutional performance (Institution may design its own questionnaire) (results and details need to be provided as a weblink)

https://stjosephs.ac.in/NAAC/Student%20Satisfaction%20Survey%202021.pdf

### RESEARCH, INNOVATIONS AND EXTENSION

- 3.1 Resource Mobilization for Research
- 3.1.1 Grants received from Government and non-governmental agencies for research projects / endowments in the institution during the year (INR in Lakhs)
- 3.1.1.1 Total Grants from Government and non-governmental agencies for research projects / endowments in the institution during the year (INR in Lakhs)

Fifty four lakhs thirteen thousand two hundred and thirty two

File Description	Documents
Any additional information	No File Uploaded
e-copies of the grant award letters for sponsored research projects /endowments	<u>View File</u>
List of endowments / projects with details of grants(Data Template)	<u>View File</u>

- 3.1.2 Number of teachers recognized as research guides (latest completed academic year)
- 3.1.2.1 Number of teachers recognized as research guides

43

File Description	Documents
Any additional information	No File Uploaded
Institutional data in prescribed format	<u>View File</u>

# 3.1.3 - Number of departments having Research projects funded by government and non government agencies during the year

# 3.1.3.1 - Number of departments having Research projects funded by government and non-government agencies during the year

7

File Description	Documents
List of research projects and funding details (Data Template)	<u>View File</u>
Any additional information	No File Uploaded
Supporting document from Funding Agency	<u>View File</u>
Paste link to funding agency website	https://stjosephs.ac.in/departmentsite/it ne w https://www.aicte-india.org/sites/default/ files/modrob/MODROB%20Scheme%20Guidelines.pd f http://www.serb.gov.in/home.php https://ic ssr.org/research-projectsmajor-and- minor/web/about.html http://www.aicte- india.org/bureaus/administration/scst-cell https://dst.gov.in/

### 3.2 - Innovation Ecosystem

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

To create an innovative ecosystem in our College we encourage the faculty to file more number of patents, so far we have filed 92 patents from various Departments, out of those 21 patents were granted. To recognise our efforts in Intelluctual Property Rights (IPR) the Centre for Intelluctual Property Rights, Anna University, Chennai has honoured us with an Intelluctual Property Award in the year 2016. Each and every year our staff and students bagged innovative research awards from various agencies including AICTE, INAE, DST, etc.

The Research and Development Centre of St. Joseph's College of Engineering, Chennai, with a objective of providing training to the interested graduates in our College, Rural youth Entrepreneurs and Women self help group, have started a start-up program in our College in association with the help of experts from the Department of Biotechnology. In the month of January 2019, we have started a Mushroom Cultivation centre for giving training in spawn production and mushroom cultivation. The mushroom harvested in the centre caters the need of the College.

To update the knowledge of the students and staff we used to give training in ARM Kit and the hardwares needed for this activity was supplied free of cost by Nuvoton Technology Corporation. We are also organizing workshops/FDPs and conferences funded by various government agencies such as DST, DBT, AICTE, etc.

The ED Cell in the institution is very vibrant and organizes events and workshops regularly to motivate the students and helps in creating an entrepreneurial eco system within the institution

The institution actively participated in the national innovation contest 2020. 95 ideas were approved of which 5 are selected for the first level of evaluation. after the mentoring session 21 proposals were shortlisted for stage 2 evaluation. After multiple rounds of evaluation mentoring and training " Micro level power management systems" by Mr.M.P.Akash was one among the 127 finalist of NIC 2020.

TOYCATHON2021 a National Level Inter- Ministerial initiative wasorganized by Ministry of Educations Innovation Cell in association with AICTE, MSME and Ministry of information and Broadcasting between 22nd and June 24th June 2021 under "AatmaNirbhar Abhiyan " scheme. The team from our institutions emerged as the winner.

Entrepreneurship Development Institute of India(EDIA) Organized A State Level Project pitch competition Tamil Nadu Students Innovator Award 2020, The details of the winners are:

- 1. Mr.Gokulaprasad P was the Winner (Rs.1,00,000/- Fellowship Award) with the title Smart Health Monitoring System.
- 2. Mr.Akash M.B awarded with the Consolation Prize (Rs. 10,000/-) for the title Micro Level Power Management System

Six of our faculty members have attended one month Innovation Ambassador training program and Received the completion certificate conducted in the month of June-July 2021. Among this Dr.Jayasreekrishnan, Dr.Lilly Ramesh and Dr.Narmatha have attended Advanced Level. Dr.Chandrasekar, Dr.Ramesh Babu and Mr.S.Aravinth have attended Basic Level.

Department of Electrical Electronics Engineering organized a NISP program for our Students on Opportunities & Challenges for Startups-NISP by Mr. Udayakumar senior member of Technical staff, MITEL Cofounder, Genuine Aspirations part of Entrepreneurs café. on 12th March 2021.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://stjosephs.ac.in/R%20and%20D/Patents% 20details.pdf

### 3.2.2 - Number of workshops/seminars conducted on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship during the year

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

8 (2020-2021)

File Description	Documents
Report of the event	<u>View File</u>
Any additional information	No File Uploaded
List of workshops/seminars during last 5 years (Data Template)	<u>View File</u>

### 3.3 - Research Publications and Awards

### 3.3.1 - Number of Ph.Ds registered per eligible teacher during the year

### 3.3.1.1 - How many Ph.Ds registered per eligible teacher within the year

0.86

File Description	Documents
URL to the research page on HEI website	https://stjosephs.ac.in/NAAC/AQAR%202020-202 1/3.3.1.xlsx
List of PhD scholars and their details like name of the guide, title of thesis, year of award etc (Data Template)	<u>View File</u>
Any additional information	No File Uploaded

# 3.3.2 - Number of research papers per teachers in the Journals notified on UGC website during the year

### 3.3.2.1 - Number of research papers in the Journals notified on UGC website during the year

150

File Description	Documents
Any additional information	No File Uploaded
List of research papers by title, author, department, name and year of publication (Data Template)	<u>View File</u>

# 3.3.3 - Number of books and chapters in edited volumes/books published and papers published in national/international conference proceedings per teacher during the year

# 3.3.3.1 - Total number of books and chapters in edited volumes/books published and papers in national/international conference proceedings year wise during year

140

File Description	Documents
Any additional information	No File Uploaded
List books and chapters edited volumes/ books published (Data Template)	<u>View File</u>

#### 3.4 - Extension Activities

3.4.1 - Extension activities are carried out in the neighborhood community, sensitizing students to social issues, for their holistic development, and impact thereof during the year

There are two unit of NSS in our campus with two Program Officer and 100 student volunteers. The NSS unit of the college is part of the

NSS wing of the affiliating University viz. Anna University. The University periodically involves the Program Officers of the colleges under its control for discussion with them about the activities that could be initiated for the betterment of the society at large. The NSS wing of the college conducts programmes in villages around the college to educate the villagers on hygiene & sanitation, literacy, women and their status in the society – how to improve it, the employment opportunities available for the youth of the village, protected water supply system, Dengue awareness, Road safety, Girl's education, awareness of AIDS, ? and "Youth for Mass Literacy", "Youth for National Integration & Social Harmony" etc.

Students stay in the village for about 7 days a year, live with the villagers, refurbish the school buildings, give a patient hearing to the woes of villagers, discuss with them possible remedies, arrange for health check up by doctors, "Youth Red Cross" (YRC) Another unit of YRC with about 30 student members with a corresponding Coordinating Officer is organizing blood donation camps joining hands with different hospitals and organizations.

These have been so successful that the hospitals and Rotary clubs are willing to associate themselves with all such activities of the student community. Non-Government Organization All the students of our institution are visiting one orphanage/ old age home each semester during their study in our institution. Students have an opportunity to do things differently. Our students get opportunities to visit villages and Orphanages and interact with people one time each semester. They spend some quality time with the children and old age people, by serving food and daily needs of them.

Students were motivated to plant trees and take care of environment, so that they will get social awareness. Also students are encouraged to learn yoga, through which they are gaining self-confidence, good physique etc.

File Description	Documents
Paste link for additional information	https://stjosephs.ac.in/NAAC/Extension%20Act ivities.pdf
Upload any additional information	No File Uploaded

# 3.4.2 - Number of awards and recognitions received for extension activities from government / government recognized bodies during the year

### 3.4.2.1 - Total number of awards and recognition received for extension activities from Government/ Government recognized bodies year wise during the year

3

File Description	Documents
Any additional information	No File Uploaded
Number of awards for extension activities in last 5 year (Data Template)	<u>View File</u>
e-copy of the award letters	<u>View File</u>

- 3.4.3 Number of extension and outreach programs conducted by the institution through NSS/NCC/Red cross/YRC etc., (including the programmes such as Swachh Bharat, AIDS awareness, Gender issues etc. and/or those organized in collaboration with industry, community and NGOs ) during the year
- 3.4.3.1 Number of extension and outreach Programs conducted in collaboration with industry, community and Non- Government Organizations through NSS/ NCC/ Red Cross/ YRC etc., during the year

16

File Description	Documents
Reports of the event organized	No File Uploaded
Any additional information	No File Uploaded
Number of extension and outreach Programmes conducted with industry, community etc for the during the year (Data Template)	<u>View File</u>

- 3.4.4 Number of students participating in extension activities at 3.4.3. above during year
- 3.4.4.1 Total number of Students participating in extension activities conducted in collaboration with industry, community and Non- Government Organizations such as Swachh Bharat, AIDs awareness, Gender issue etc. year wise during year

3500

File Description	Documents
Report of the event	No File Uploaded
Any additional information	No File Uploaded
Number of students participating in extension activities with Govt. or NGO etc (Data Template)	<u>View File</u>

#### 3.5 - Collaboration

- 3.5.1 Number of Collaborative activities for research, Faculty exchange, Student exchange/internship during the year
- 3.5.1.1 Number of Collaborative activities for research, Faculty exchange, Student exchange/internship year wise during the year

674

File Description	Documents
e-copies of related Document	<u>View File</u>
Any additional information	No File Uploaded
Details of Collaborative activities with institutions/industries for research, Faculty	<u>View File</u>

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

13

File Description	Documents
e-Copies of the MoUs with institution./ industry/corporate houses	<u>View File</u>
Any additional information	No File Uploaded
Details of functional MoUs with institutions of national, international importance, other universities etc during the year	<u>View File</u>

#### INFRASTRUCTURE AND LEARNING RESOURCES

#### 4.1 - Physical Facilities

4.1.1 - The Institution has adequate infrastructure and physical facilities for teaching- learning. viz., classrooms, laboratories, computing equipment etc.

St. Joseph's College of Engineering spans over an area of 14,91,000 square feet. The built-up area is about 1, 26,542 square feet. Class rooms with adequate seating, lighting, ventilation are housed in the sprawling campus. 11 rooms are technology enabled smart class rooms. The campus includes a state of the art air conditioned indoor auditorium equipped with modern audio-video technologies and a seating capacity of 200 persons. 8 corporate halls to house campus meetings, tech talks, guest lectures etc. are present. Faculties as well as administrative staff are provided with cubicle seating. An examination cell with high tech equipment for the conduct of internal as well as university exams is present. Girl's resting rooms, first aid centre are available inside the campus. Separate canteens for boys and girl catering hygienic veg/non-veg/diet food are available. Reverse osmosis treated purified drinking water is provided to students and staff throughout the campus. Huge fleet of buses covering not only all parts of the city but also fringe areas of the city is being operated.

Stationary stores, printing and binding sections and low cost bakery offering snack items are functioning inside the campus. Separate hostels for boys and girls, ATMs, gymnasiums with modern tools and equipment, separate beauty salons are functioning in the campus. Intercom facility connecting entire departments and buildings are provided. Fully functioning chapel, temple and a mosque have been constructed inside the college campus. Guaranteed, un-interrupted power supply with sufficient number of generator sets, inverters, UPSs are provided to benefit class rooms, laboratories and hostel rooms.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://stjosephs.ac.in/facility.html

4.1.2 - The Institution has adequate facilities for cultural activities, sports, games (indoor, outdoor),

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#### gymnasium, yoga centre etc.

The college emphasize on the overall development of students, by the way of motivating talented and deserving sports men and sports women, offering them free seat, free hostel accommodation, sportswear and gear. The generosity coupled with a noble vision of the management, the institute has bagged numerous prestigious awards and achievements. Sports are given equal weightage as academics. A sports village established on 2001 dedicated for sports activities. The College has the highest intake of sports students in Tamil Nadu.

There are sufficient numbers of atriums, conference halls, auditoriums, amphitheaters for organizing cultural, literary and indoor sports events. Sports facilities for students such as Basketball court, Football Field, Volleyball court, Table Tennis boards, Indoor Badminton court hockey fields, track and field's etc. are provided. The sports students start their practice at 5.30 a.m. in the morning and 4.00 p.m. in the evening. All the sports activities are encouraged by providing necessary facilities when the students participate in Inter University, All India University and other sports tournaments.

#### Yoga Activities:

Among different fundamental "Sutras" in educating a student like their academic enrichment, physical healthiness, the mental empowerment. In addition to their academic schedule, cultural and physical activities, our college organizes regular "Yoga Activities" on every Saturday. Regular assessment through the response of students who involve themselves in yoga practice indicates improvements in their studies and functions.

#### Regular Cultural activities:

The expressive professionalism is imparted through cultural programs being conducted periodically. The institute has spacious auditoria, with excellent acoustics and massive seating capacity. Programs were planned to impart professional ethics, societal service, environmental protection and patriotism. The students have won various trophies and metals in various competitions. The college also conducts intra-college cultural competitions and cash prizes and merit certificates are distributed on the college day.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://stjosephs.ac.in/sports.html

### 4.1.3 - Number of classrooms and seminar halls with ICT- enabled facilities such as smart class, LMS, etc.

#### 147

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://stjosephs.ac.in/facility.html
Upload Number of classrooms and seminar halls with ICT enabled facilities (Data Template)	<u>View File</u>

### 4.1.4 - Expenditure, excluding salary for infrastructure augmentation during the year (INR in Lakhs)

### 4.1.4.1 - Expenditure for infrastructure augmentation, excluding salary during the year (INR in lakhs)

#### 47792249.00

File Description	Documents
Upload any additional information	<u>View File</u>
Upload audited utilization statements	<u>View File</u>
Upload Details of budget allocation, excluding salary during the year (Data Template	<u>View File</u>

#### 4.2 - Library as a Learning Resource

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

#### AutoLib - Library Management Software

Autolib software is a web enabled software developed using HTML. JavaScript and Java Technologies to provide more flexibility, security and stability. The software needs to be installed only in the server which saves a lot of time from maintaining the client systems.

The LMS is designed to work as a cross-platform software on Intranet and Internet environments which makes it user-friendly and intuitive. This system uses MySQL - an open source RDBMS as the database. This software consists of the modules viz. Database Management Systems, Search (OPAC), Counter Management Systems, Acquisition Control Systems, Report Management, Systems Administration-Resources Linking and Web Module.

The login passwords are provided to all the users for authentication with the ability to change their password at any time. The system supports a multitude of stakeholders under the following categories,

- Users Access to search and ability to view their transactions
- Counter Access to functions related to counter transactions
- Admin Access to all modules

OPAC (online public access catalogue) facilitates users to know the availability of books, searching of documents and borrowing details of documents within campus from the place where they are.

Dashboard facility is a single window access to use all the features of the software based on his privileges/roles by a simple click. Users need not to go to each and every menu to use this facility. Access facility is given in the dashboard to use all the menus.

#### Facilities available in Dashboard for Admin I

Admin 1 can get the following details by clicking the respective icons/buttons

#### Collection:

#### Total Collection Total Members

#### Transaction details (to-day)

- 1. List of books issued books today
- 2. List of books returned today
- 3. List of books renewed
- 4. List of books due for returned today
- 4. Overdue amount today
- 5. Overdue paid and overdue balance

#### Facilities available in Dashboard for Users

Users need not go to each and every menu to use this facility.

Search Facility - Allows using Search, Advanced Search, Quick Search, Journal Search, etc

Change Password - Allows changing the password.

New Arrivals - by clicking this, user will get a list of newly added resources in the library

Transaction details - By clicking, the user will know the status of the total number of books issued, returned, reserved - by a particular user.

Overdue charges - The overdue charges paid and pending for a user.

#### Modules Description:

- 1. Database Management System: This modules allows to create, update/edit and maintain the following databases such as
  - Books, Thesis, Non Books, Project Reports
  - Journals, Journal Issues Journal Articles and Back volumes
  - News Paper Clippings
  - Authors, Publishers, Suppliers Subjects
  - Members, Departments, Courses
- 2. Search: This module is designed to search all the above databases using all the important fields and print search results in any desired format
  - Simple search
  - Advanced search
  - Restricted search
- 3. Circulation Management Systems: This Module is designed for all types of counter transactions for Books, Journal Issues, Book Bank Books, Reports, Thesis and Non Books such as
  - Issue/Return/renewal
  - Reservation/Reservation Cancel
  - Reminders/Overdue Reports/No due Certificates
  - Printing barcode labels
  - Transaction reports
- 4. Acquisition Control Systems: This module is designed to automate various activities involved in Book ordering and processing such as
  - Checking for duplicates
  - Receipt of Documents and Invoice processing
  - Order follow-up, payment to Suppliers
  - Fund/Budget control
  - Transfer the Processed Indents details to book Database
  - Status report, Vendor Information, etc.
- 5. Serial Control System (Journals): This Module is designed for automate various activities involved in subscription of journals such as

- Creation and maintenance of Journal Master
- Subscription/Renewal of Journals
- Invoice Processing, payment and budget control
- Generation of Journal issues with details
- Receipt of issues and claiming missing issues
- Searching/Browsing
- 6. Systems Administration: This modules allows to
  - Create new user login ID, Password and grant rights to access various modules
  - Create group Master-to set due date, allowed cards for different documents for different categories
  - Conduct online stock verification
  - Maintain Budget Master
- 7. Report Management: This module is designed to generate and print a large number of reports such

as

- List of books by author, title, unique titles, supplier, call number, subject, department, document type, availability, etc.
- Amount spent for procuring books under various
- List of Journals Indian/Foreign
- List of Members
- Accession register, catalogues
- List of Suppliers/Publishers
- 8. Web Module: This module allows to search various databases using browsers like Internet Explorer or Lan/Intranet environment using Web services and it has the following WEB OPAC modules
  - Simple search/Advanced search
  - Statistics
  - Search reports, circulation reports

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for Additional Information	https://stjosephs.ac.in/facility.html

### 4.2.2 - The institution has subscription for the A. Any 4 or more of the above following e-resources e-journals e-

#### ShodhSindhu Shodhganga Membership ebooks Databases Remote access toe-resources

File Description	Documents
Upload any additional information	<u>View File</u>
Details of subscriptions like e- journals,e-ShodhSindhu, Shodhganga Membership etc (Data Template)	<u>View File</u>

### 4.2.3 - Expenditure for purchase of books/e-books and subscription to journals/e- journals during the year (INR in Lakhs)

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

1643673.00

File Description	Documents
Any additional information	<u>View File</u>
Audited statements of accounts	<u>View File</u>
Details of annual expenditure for purchase of books/e-books and journals/e- journals during the year (Data Template)	<u>View File</u>

### 4.2.4 - Number per day usage of library by teachers and students (foot falls and login data for online access) (Data for the latest completed academic year)

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

120

File Description	Documents
Any additional information	<u>View File</u>
Details of library usage by teachers and students	<u>View File</u>

#### 4.3 - IT Infrastructure

#### 4.3.1 - Institution frequently updates its IT facilities including Wi-Fi

The college has adequate facilities of the information technologies including Wi - Fi and the internet connections well spread through

the campus and it is updated frequently. The institution is equipped with 1614 internet connected computers, besides having 11 interactive boards with visualizers and LCD projectors installed in all departments. All the systems in the college campus are provided with LAN facility. The college has a well-equipped smart class rooms with all modern facilities concerning ICT. The conference halls consist of computers with internet and LCD Projectors.

The entire college campus is connected through fiber optic network which ensures reliable connections all the time. Internet Facility is available at all hostel rooms, library, placement blocks and all the laboratories within the campus.

Campus network enables remote learning, conferences, collaborative research, industry relations, alumni and remote recruitment, competitive examinations conducted by the Government. The campus has integrated software for various administrative and academic activities. All the notices are electronically circulated through emails. The college uses various open source and license software which are upgraded periodically with the latest version. A team of in-house staff is designed to take care of the IT & related needs of the campus such as Software, Hardware and Networking, Website designing and hosting, Email, SMS solutions, etc.

All the computers are connected to uninterrupted power supply for safe operations and security is also ensured due to the usage of hardware firewall. The various other computing facilities like printers, software, database, dedicated lease-line of 215 Mbps bandwidth with Wi-Fi networking caters to all the labs and departments for the benefit of faculty and students.

The institution, including hostels is well connected through OFC technology which connects 1614 Nodes. NMEICT BSNL 20 lines of 10 Mbps (VOIPP) are utilized for academic purposes. This internet facility is used well for research, curricular, co-curricular and extra-curricular activities by students and staff members.

Infrastructure facilities for e-content development including lecture capturing center, ICT enabled seminar halls help the faculty to prepare ICT enabled learning materials. Fully air conditioned conference halls, and tutorial rooms equipped with all modern facilities & Audio Visual halls are also in place for special lectures by renowned resource persons with informative models for power point presentations and animations.

Construction of new laboratories, renovation and up-gradation of

existing laboratories, expansion and modernization of facilities are an integral part of our growth plan. Laboratories with desktops and workstations provide centralized computing facilities to faculty members and students for promoting the teaching and learning environment.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://stjosephs.ac.in/facility.html

#### **4.3.2 - Number of Computers**

#### 1614

File Description	Documents
Upload any additional information	<u>View File</u>
List of Computers	<u>View File</u>

### 4.3.3 - Bandwidth of internet connection in the A. ? 50MBPS Institution

File Description	Documents
Upload any additional Information	<u>View File</u>
Details of available bandwidth of internet connection in the Institution	<u>View File</u>

#### 4.4 - Maintenance of Campus Infrastructure

- 4.4.1 Expenditure incurred on maintenance of infrastructure (physical and academic support facilities) excluding salary component during the year (INR in Lakhs)
- 4.4.1.1 Expenditure incurred on maintenance of infrastructure (physical facilities and academic support facilities) excluding salary component during the year (INR in lakhs)

14257740

File Description	Documents
Upload any additional information	<u>View File</u>
Audited statements of accounts	<u>View File</u>
Details about assigned budget and expenditure on physical facilities and academic support facilities (Data Templates)	<u>View File</u>

4.4.2 - There are established systems and procedures for maintaining and utilizing physical, academic and support facilities - laboratory, library, sports complex, computers, classrooms etc.

The campus holds well established standard systems and procedures for maintaining the physical, academic and support facilities that are governed by the supervision of faculty in charges in college level. They ensure the various aspects of utilization and maintenance of the physical, academic and support facilities such as maintenance of buildings, laboratories, classrooms, library, sports complex, computers, etc. Adequate in - house staff is employed to meticulously maintain hygiene, cleanliness and infrastructure on the campus so as to provide a congenial learning environment..

#### Class Room

- Most of the lectures take place in classrooms with projector, microphone and speakers. This is to ensure usage of new audiovisual pedagogical techniques during the teaching process along with this we have audio visual halls where lecture are given.
- The college has various committees for maintenance and upkeep of infrastructure. At the departmental level, HODs submit their requirements to the Principal regarding classroom furniture and other.

#### Laboratory

- Record of maintenance account is maintained by lab technicians, Lab In charge and supervised by HODs of the concerned departments.
- Department wise annual stock verification is done by concerned Head of the Department.
- Regular maintenance of Computer Laboratory equipment's are done by Laboratory Assistant along with Laboratory attendant and they are headed by the faculty in charge. Periodic reporting on requirements of repairs and maintenance are

- submitted by the Lab In charges to the HODs.
- The requirements are collectively processed in every semester break so as to keep things ready for the new semester.
- The non-teaching staff is also trained for safety.

#### Library

- A regular update on new additions is provided by the library.
- A library committee works regularly to oversee the functioning of the library and various other committees' coordinate with each other to enable the students to get maximum exposure and participation and also to avail all the facilities provided by the college
- The maintenance of the reading room and stock verification of library books is done regularly by library staff.

Sports and Games is an internal part of the college and coaches are available for the students regarding the maintenance of sports equipment the college sports in charge is deputed.

#### Additionally

- The college has various committees for maintenance and upkeep of infrastructure. At the departmental level, HODs submit their requirements to the Principal regarding classroom furniture and other.
- Suitable budget is allocated every year for the maintenance of various facilities.
- An eco-friendly environment is of prime importance in the college.
- Regular cleaning of water tanks, proper garbage disposal, pest control, landscaping and maintenance of lawns is done. wash rooms and rest rooms are well maintained. The Green Cover of the campus is well maintained
- Cleanliness of environment in men's and women's hostel is maintained
- Regular maintenance of the water cooler and water purifier is done. The campus maintenance is monitored through surveillance Cameras.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://stjosephs.ac.in/NAAC/4.4.2%20Mainten ance%20of%20Laboratory.pdf

#### STUDENT SUPPORT AND PROGRESSION

#### 5.1 - Student Support

- 5.1.1 Number of students benefited by scholarships and free ships provided by the Government during the year
- 5.1.1.1 Number of students benefited by scholarships and free ships provided by the Government during the year

#### 1415

File Description	Documents
Upload self attested letter with the list of students sanctioned scholarship	<u>View File</u>
Upload any additional information	<u>View File</u>
Number of students benefited by scholarships and free ships provided by the Government during the year (Data Template)	<u>View File</u>

- 5.1.2 Number of students benefitted by scholarships, free ships etc. provided by the institution / non- government agencies during the year
- 5.1.2.1 Total number of students benefited by scholarships, free ships, etc provided by the institution / non- government agencies during the year

131

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

# 5.1.3 - Capacity building and skills enhancement initiatives taken by the institution include the following: Soft skills Language and communication skills Life skills (Yoga, physical fitness, health and hygiene) ICT/computing skills

A. All of the above

File Description	Documents
Link to Institutional website	https://stjosephs.ac.in/NAAC/5.1.3.pdf
Any additional information	<u>View File</u>
Details of capability building and skills enhancement initiatives (Data Template)	<u>View File</u>

### 5.1.4 - Number of students benefitted by guidance for competitive examinations and career counseling offered by the institution during the year

2278

### 5.1.4.1 - Number of students benefitted by guidance for competitive examinations and career counseling offered by the institution during the year

2278

File Description	Documents
Any additional information	<u>View File</u>
Number of students benefited by guidance for competitive examinations and career counseling during the year (Data Template)	<u>View File</u>

### **5.1.5 - The Institution has a transparent** mechanism for timely redressal of student

A. All of the above

grievances including sexual harassment and ragging cases Implementation of guidelines of statutory/regulatory bodies Organization wide awareness and undertakings on policies with zero tolerance Mechanisms for submission of online/offline students' grievances Timely redressal of the grievances through appropriate committees

File Description	Documents
Minutes of the meetings of student redressal committee, prevention of sexual harassment committee and Anti Ragging committee	<u>View File</u>
Upload any additional information	No File Uploaded
Details of student grievances including sexual harassment and ragging cases	<u>View File</u>

#### **5.2 - Student Progression**

#### 5.2.1 - Number of placement of outgoing students during the year

#### 5.2.1.1 - Number of outgoing students placed during the year

1082

File Description	Documents
Self-attested list of students placed	<u>View File</u>
Upload any additional information	<u>View File</u>
Details of student placement during the year (Data Template)	<u>View File</u>

#### 5.2.2 - Number of students progressing to higher education during the year

#### 5.2.2.1 - Number of outgoing student progression to higher education

59

File Description	Documents
Upload supporting data for student/alumni	<u>View File</u>
Any additional information	No File Uploaded
Details of student progression to higher education	<u>View File</u>

- 5.2.3 Number of students qualifying in state/national/international level examinations during the year (eg: JAM/CLAT/GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/State government examinations)
- 5.2.3.1 Number of students qualifying in state/ national/ international level examinations (eg: JAM/CLAT/NET/ SLET/ GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/ State government examinations) during the year

107

File Description	Documents
Upload supporting data for the same	<u>View File</u>
Any additional information	No File Uploaded
Number of students qualifying in state/ national/ international level examinations during the year (Data Template)	<u>View File</u>

#### 5.3 - Student Participation and Activities

- 5.3.1 Number of awards/medals for outstanding performance in sports/cultural activities at university/state/national / international level (award for a team event should be counted as one) during the year
- 5.3.1.1 Number of awards/medals for outstanding performance in sports/cultural activities at university/state/ national / international level (award for a team event should be counted as one) during the year.

119

File Description	Documents
e-copies of award letters and certificates	<u>View File</u>
Any additional information	<u>View File</u>
Number of awards/medals for outstanding performance in sports/cultural activities at univer sity/state/national/international level (During the year) (Data Template)	<u>View File</u>

5.3.2 - Institution facilitates students' representation and engagement in various administrative, cocurricular and extracurricular activities (student council/ students representation on various bodies as per established processes and norms)

St. Joseph's College of Engineering encourages better participant relationships and paves an open door for students to expose their inbuilt skills and hidden talents. The institution promotes value-based education for instructing social accountability and good citizenry amongst its student community. The institution has the sufficient infrastructure and upholds active participation of the students in social, cultural and leisure activities. Producing all-rounders by encouraging student participation in various technical and non-technical activities has been one of the institution's aim. The institution facilitates programs for developing various skills and competencies of the students thereby achieve holistic development.

The Institution has implemented various schemes such as the National Service Scheme (NSS), Youth Red Cross (YRC), Non-Governmental Organization (NGO), Civil Services Academy, Defense Academy and Entrepreneurship Development Cell (EDC) to develop the skill of students in different arenas. These schemes are functioning under the guidance of various faculty members who act as coordinators, thus motivating student participation in social activities. Students are actively involved in the above mentioned cells and thus improve their social values and turn into responsible citizens.

The institution has various student clubs and the heads of these clubs being a part of the academic council oversee all the cultural activities of St. Joseph's. The technical and non- technical clubs include the Tamil Mandram, English Club, Maths Club, CTS Club, Developer Students Club, Coding Club and Eco-Soc Club. The Institution provides wider avenues for the students in terms of development of technical skills, updating of knowledge, personality

development and service to the society through technical societies such as the Computer Society of India (CSI) and Indian Society for Technical Education (ISTE). Students are organizing events as well as participating in events through student forums such as the IETE Students Forum, IEEE Students Forum, IChem Students Forum, SAE Students Forum, IWS Forum and the ISHPE Forum.

In addition to providing scope for the growth of the technical skill of the students, exposure to inter-collegiate and intra-department symposiums promotes self-confidence, leadership and team-spirit amongst the student community. The Institution conducts department wise students meetings at the start of every semester, where a six-student team participates as representatives of their department and give feedback on their academic need. Thus the institution has an active student council and students are represented on all the academic and administrative committees of the institution.

File Description	Documents
Paste link for additional information	https://stjosephs.ac.in/NAAC/5.3.2.pdf
Upload any additional information	<u>View File</u>

### 5.3.3 - Number of sports and cultural events/competitions in which students of the Institution participated during the year (organized by the institution/other institutions)

### 5.3.3.1 - Number of sports and cultural events/competitions in which students of the Institution participated during the year

135

File Description	Documents
Report of the event	<u>View File</u>
Upload any additional information	<u>View File</u>
Number of sports and cultural events/competitions in which students of the Institution participated during the year (organized by the institution/other institutions (Data Template)	<u>View File</u>

#### 5.4 - Alumni Engagement

5.4.1 - There is a registered Alumni Association that contributes significantly to the development of the institution through financial and/or other support services

The alumni association in St Joseph's college of Engineering was inaugurated for its functioning from 1998 onwards. Officially Alumni Association has been registered as "St.Joseph's College of Engineering - Alumni Association" on 5th August 2019. The institution is extremely proud of every member of its alumni. Most of them are successful in their careers and in the field of entrepreneurship. The alumni meet is conducted once or twice in a year, where the passed out students of under graduate and post graduate programs share their views and give suggestions for the betterment curriculum, campus and to their junior students.

A dedicated link in our college website is available exclusively for our alumni students, where they can enroll their profile get membership in the alumni association through online. We are proud to say that a significant number of our passed out students are currently continuing either higher studies or employment at U.S.A, U.K., Germany, Australia, Canada, and Singapore etc. These alumni members are regularly informed about the actives and developments of the college through official Facebook alumni group.

#### Role model and inspiration

Any distinguished alumni are an effective role model accepted by students. 'Alumni special talks' are been often arranged by the departments through online and their experiences that are shared regarding time management, self-discipline and character or career management often found be more easily accepted as guidance and inspiration by students. Through this way our alumni are successfully contributing in strengthening confidence and inculcate the right social culture and navigate their junior students.

#### Career Guidance

Our college has a unique platform of 'Alumni mentors' where the distinguished alumni, mentor the current students through the networking forums. They share their experiences, knowledge and advice the students and by means of these alumni meets, a strong bond is created between the passed-out students and current batch and helps them to get best career guidance of their choice. Apart from this, the alumni frequently visit the institution and deliver guest lectures on career guidance in their areas of expertise and motivate the young minds.

Successful alumni entrepreneurs are often invited to share their success stories through online during this new normal situation. The alumni also help the final year students of the various streams of engineering and business administration to get their placements and summer internship in their companies. The alumni association meetings also pave the way for the successful placements of the students.

File Description	Documents
Paste link for additional information	https://stjosephs.ac.in/Elite%20Alumni.html
Upload any additional information	<u>View File</u>

### **5.4.2 - Alumni contribution during the year** (INR in Lakhs)

#### D. 1 Lakhs - 3Lakhs

File Description	Documents
Upload any additional information	<u>View File</u>

#### GOVERNANCE, LEADERSHIP AND MANAGEMENT

#### 6.1 - Institutional Vision and Leadership

6.1.1 - The governance of the institution is reflective of and in tune with the vision and mission of the institution

VISION

To become a world class educational centre of the nation for Engineering, Technology, Computer Applications and Management with moral and professional standards to serve the community at large.

Articulation of the vision

We believe in providing a quality technical education coupled with strong fundamentals and moral standards would enable students to excel in their respective field of study. We also empower students to perform better at their work place and become a better citizen

#### **MISSION**

To achieve academic excellence in Engineering, Technology, Computer

applications and Management Education.

To inculcate high moral and professional standards among our students.

To develop overall personality of the students.

To promote industry institute interaction through more number of collaborative programs with industries / research and development centers.

To venture for sustained placement for our students through campus interviews

Articulation of the mission

The mission of the institute would be the reality if we could create the professionals with technical competence and managerial skills with no compromise on values and ethics. In the journey of accomplishing the vision, the institute strives to bring a holistic development of the students to fulfill the expectancies of the industry and society.

The nature of governance, perspective plans and participation of the teachers in the decision making bodies

The Chairman leads the administration of the institution and guides Principal, faculty and students work towards the vision of the institute. Based on the Vision and Mission of the institute and driven by the needs of the corporate world, society and stakeholders, the strategic plans of the institute are framed. All vital decisions regarding the commencement of new courses, expansion of infrastructure, formulation and promulgating of strategy are approved by the Chairman. The implementation process is further discussed with the Principal and Heads of the departments for execution.

The perspective plans are prepared by the Principal. The academic calendar (semester wise) scheduling the internal assessment tests, industrial visits, conferences, workshops, seminars, FDPs, club activities, sports day, graduation day, NGO visits, celebrations etc is prepared by the Principal after having discussions with the HODs and various committee members. The Principal ensures quality standards in teaching learning Process,

evaluation system and other related activities. The Principal initiates various quality enhancement programmes in the institution and is assisted by HODs, Administrative Head, In-charges and Coordinators of various cells/committees in decision making process of the Institute.

HOD's prepare the operational plan for their respective departments with the concern of the Principal. Faculty and staff are assigned with the roles and responsibility to work in a harmonious environment with complete transparency. HOD's conduct periodic meeting in the department The collective suggestions given by the faculty, students, corporate and other stake holders are discussed with the Principal. The Principal discusses the suggestions and gets the approval of the chairman. The approved decisions are circulated among the stakeholders for execution. The management ensures a smooth flow of information Top down and bottom up paving way for excellent team work among the stakeholders.

File Description	Documents
Paste link for additional information	https://stjosephs.ac.in/about%20us/index.htm
Upload any additional information	<u>View File</u>

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

The Institution has a culture of decentralized governance system with well-defined inter-relationships. Institute delegates adequate and systematized authority to the departments to work towards decentralized governance system. Various committees like the Advisory Committee, Placement Committee, EDC and so involving faculty are constituted to manage different institutional activities. The management has extended enough financial powers to Principal and Department Heads to carry out these activities.

A case in point: Annual budget: Proposal, Approval and Allocation.

Principal is responsible for the preparation of the overall budget. The Budget planning for the year starts in the month of January. The Department heads and the administrative in- charges are instructed to plan the budget for the forthcoming year. They are invited to submit their carefully proposed budget for every academic year by the last week of February.

The HOD instructs the Department in-charges to prepare the budget proposal for various activities like workshops, guest lectures, seminars, conferences, training, value added courses, professional body activities and industrial visits etc. In addition to this the lab-in charges are also asked to come up with a proposal of their requirements for purchase of new equipment, repairs and maintenances, service, training and up gradation. The final budget proposal is prepared after scrutinizing at department level by the concerned heads.

The administrative in - charges for placement, electrical, water, transport, mess, exam office, and civil works will also submit the proposal to the Principal. The budget proposal for the library is prepared by the librarian after consulting various departments.

The budget proposal at the institutional and departmental levels is submitted to the Principal on or before 1st of March. The Principal then consolidates all the budget proposals received from the subordinates and organize a meeting to eliminate redundancy. The modified proposed budget is forwarded to the Chairman for approval. The approved budget is then communicated to all heads and in-charges through proper channels. A monthly requirement form is submitted to the Principal every month along with the previous month's expenditure. On the approval of of the Principal and the Director, Accounts department releases the funds for the same. Through effective decentralization, the institution practices successful delegation and enhances the productivity of the college. This style of participative management ensures complete and constructive delivery of financial activities

File Description	Documents
Paste link for additional information	https://stjosephs.ac.in/NAAC/AQAR%202020-202 1/6.1.2.pdf
Upload any additional information	<u>View File</u>

#### 6.2 - Strategy Development and Deployment

6.2.1 - The institutional Strategic/perspective plan is effectively deployed

The leadership provides clear vision and mission to the institution. The functions of the institution and its academic and administrative units are governed by the principles of participation and transparency.

The college has the following perspective plans:

- 1. Enhancing the quality of Teaching Learning
- 2. Promotion of Research among faculties and students
- 3. Talent acquisition and retention
  - 4. Quality Assurance Measures
- 5. Improving Entrepreneurship Development and Industry-Institution-Interaction
- 6. Placement and Training activities

Example of an activity successfully implemented based on the strategic planning:

Title of Practice: Promotion of Research among the faculty and students

#### Objectives:

- To upgrade the qualification and knowledge of the faculty and students
- To create a research culture in the institute
- To establish recognized center of higher learning & research leading to Ph. D. and facilitate further research.

The need for upgrading the qualification of the teachers was perceived well ahead by the Institution. The initiative taken by the management and encouragement of the Principal has motivated many faculty members to pursue their PhD degrees. The faculties are given OD for120 days to complete their research work. In addition to this they are also givenon duty of two days per week to complete their course work during the first year of their research number of PhD's in the college is130.40 Faculty members are also recognized supervisors in various universities and 5 departments are recognized

as Research Centers by Anna University.

To bring about research culture in the institute, the management encourages the faculties and students to publish articles in refereed journals of high repute. Faculty are encouraged to attend conferences both at national and inBesides faculties, the students are also motivated to attend the conferences, workshop and take-up internship, and collaborative projects for up-gradation of knowledge. The college conducts national level seminars/ conferences to provide a platform for the students and faculties to present their research findings.

The incubation center and the center of excellence approved by MSME is again a stride taken by the college in the direction of promoting research work.

File Description	Documents
Strategic Plan and deployment documents on the website	<u>View File</u>
Paste link for additional information	https://stjosephs.ac.in/NAAC/AQAR%202020-202 1/6.2.1%20(a).pdf, https://stjosephs.ac.in/N AAC/AQAR%202020-2021/6.2.1%20(b).pdf
Upload any additional information	<u>View File</u>

6.2.2 - The functioning of the institutional bodies is effective and efficient as visible from policies, administrative setup, appointment and service rules, procedures, etc.

Board of Governance

#### Governing Council:

The governing councilconsists of Chairman, Managing Director, Director, The region Officer SRC, the Commissioner of Technical Education(DOTE) Industry representative, Principal and Senior Faculty Members. The governing council is responsible to monitor the overall performance of the institution. The committee meets once in a year to review the performance and provides suggestions in the areas of improvements.

#### Academic Council:

The council is responsible to monitor the academic schedule, maintaining the standards of teaching, research and the assessment tools and procedures. It reviews and appraises all the functions of the sub committees on a periodical basis.

#### Advisory Committee

This committee plans and monitors all academics and other activities at institutional level. It reviews the quality of course delivery process and attainment of outcomes. It also reviews the process for providing skill and knowledge beyond the syllabus in attaining PO, PSO through CO. The committee guides Professional society activities, and Industry institute interaction activities, functions of estate office, and Placement and Training activities. The committee meets once in two months.

Roles of Administrators & Decision Makers:

#### Chairman:

- Responsible for formulating and promulgating the Policy and objectives of the Institution.
- · Overall control of the financial function of the Institution.
- Overall responsible for recruitment/inducting potential personnel against the nature of job, including Principal.
- Overall responsibility for providing resources vise Human, Infrastructure, other facilities and suitable environment for the successful functioning of the institution.

#### Managing Director:

- Responsible for implementing the decisions with regard to St. Joseph's college of Engineering taken by the Trust from time to time.
- Responsible for the administration of Transport and Mess facilities in consultation with Chairman & Managing Director
- Responsible for day to day bill passing

#### Director:

- Responsible for implementing the decisions with regard to St. Joseph's college of Engineering taken by the Trust from time to time.
- · Responsible for day to day bill passing

• Responsible for the administration of Transport and Mess facilities in consultation with Chairman & Managing Director

#### Principal:

Overall responsibility of planning and implementing all academic activities.

- · Overall responsible for planning of Academic calendar.
- Budget finalization for academic activities.
- Finalisation of resource acquiring.
- Communicating with AICTE, NBA, DOTE, Anna University and other Statutory bodies and implementing / executing the instructions / guidelines provided by them.
- Responsible for evaluating and monitoring the performance of various departments of the Institution and reporting to the Chairman, Managing Director & Director.
- Responsible for organizing and conducting staff meetings.
- To ensure that students develop their interpersonal skills apart from regular curriculum.
- To motivate and encourage students to excel in various academic, co-curricular & extracurricular activities.
- · To ensure the discipline of the college is well maintained.

#### Dean

- Responsible for the process of faculty members applying for higher studies - Ph.D., monitoring of availing OD during the period of Ph.D.courseand conductingthe periodic reviewsto monitor their progress.
- Responsible for the process of faculty for applying to attend training , FDP, workshop and conference in India and abroad
- Responsible for motivating the faculty members todo research work and publish their work in high reputed journals

#### Head of Departments:

- Responsible for planning and conducting teaching learning process successfully & ensure discipline among students and faculty members of their respective departments.
- Responsible for organizing and conducting staff meetings.
- Ensure that they get all the academic facilities for human & physical resources & ensure that their departments and laboratories are well maintained.

- Ensure that Industrial visits, Guest lecturers, Seminars, Association functions, etc are arranged for the benefit of students.
- Responsible for reporting periodically about the status of various activities being performed in the department to the Principal.
- Analyze the feedbacks from both students and parents and to take appropriate corrective/preventive actions for improvement if necessary in consultation with Principal.
- Responsible for work load allocation in the beginning of each semester with the approval from Principal.
- Budget Request submission to Principal after discussing with various in charges.

#### Manager

- Overall In charge of administration of the college.
- Responsible to look into all matters related to AICTE, DOTE, Anna University and Government of Tamil Nadu and for maintaining needed records.
- · Responsible for organizing the Public Relation functions.

#### Grievance Redressal Mechanism

A committee consisting of about four members (two women faculty) is constituted. Grievances form the students, faculty or staff if received is discussed and the necessary action is initiated by Grievance Redressal Committee

Service , Recruitment and Promotion Rules :

The service the promotion and recruitment rules are framed in accordance to the norms of AICTE, Anna University and it is made available in the webpage of the institution.

File Description	Documents
Paste link for additional information	https://stjosephs.ac.in/Service%20Rules.pdf
Link to Organogram of the institution webpage	https://stjosephs.ac.in/NAAC/6.2.2%20(b)%200 rganogram%20of%20the%20institution.pdf
Upload any additional information	<u>View File</u>

## 6.2.3 - Implementation of e-governance in areas of operation Administration Finance and Accounts Student Admission and Support Examination

#### A. All of the above

File Description	Documents
ERP (Enterprise Resource Planning)Document	<u>View File</u>
Screen shots of user inter faces	<u>View File</u>
Any additional information	No File Uploaded
Details of implementation of e- governance in areas of operation, Administration etc(Data Template)	<u>View File</u>

#### **6.3 - Faculty Empowerment Strategies**

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

#### Teaching Staff:

- 1. Medical allowances to meet emergency medical expenses of staff and their dependents with medical leave.
- 2. Free transport and mess facilities to all
- 3. Marriage gift for staff and their wards and providing leave.
- 4. House warming gift.
- 5. Maternity leave with full salary.
- 6. Registration fees for attending conferences, workshops and FDPs
- 7. Providing professional body membership fees
- 8. Providing financial support to attend and present research papers in national level and international level conferences and for refereed journals.
- 9. Employee Provident Fund, Pension Schemes.
- 10. Blazers for all teaching staff for comfortable teaching.
- 11. On campus free medical facilities and physiotherapy
- 12. Cafeterias

#### Non Teaching Staff:

1. Medical allowances to meet emergency medical expenses of non - teaching staff and their dependents with medical leave

- 2. Vacation for the securities with travelling allowance
- 3. Three sets of uniform per year
- 4. Marriage gift for staff and their wards with leave.
- 5. House warming gift.
- 6. Maternity leave with full salary.
- 7. On campus free medical facilities and physiotherapy
- 8. Employee Provident Fund and Pension Schemes
- 9. Free accommodation in hostel for out station employees
- 10. Free transport and mess facilities
- 11. Cafeterias

File Description	Documents
Paste link for additional information	https://stjosephs.ac.in/NAAC/AQAR%202020-202 1/6.3.1.pdf
Upload any additional information	<u>View File</u>

### 6.3.2 - Number of teachers provided with financial support to attend conferences/ workshops and towards membership fee of professional bodies during the year

### 6.3.2.1 - Number of teachers provided with financial support to attend conferences/workshops and towards membership fee of professional bodies during the year

1

File Description	Documents
Upload any additional information	<u>View File</u>
Details of teachers provided with financial support to attend conference, workshops etc during the year (Data Template)	<u>View File</u>

- 6.3.3 Number of professional development /administrative training programs organized by the institution for teaching and non-teaching staff during the year
- 6.3.3.1 Total number of professional development /administrative training Programmes organized by the institution for teaching and non teaching staff during the year

121

File Description	Documents
Reports of the Human Resource Development Centres (UGCASC or other relevant centres).	<u>View File</u>
Reports of Academic Staff College or similar centers	<u>View File</u>
Upload any additional information	<u>View File</u>
Details of professional development / administrative training Programmes organized by the University for teaching and non teaching staff (Data Template)	<u>View File</u>

6.3.4 - Number of teachers undergoing online/face-to-face Faculty development Programmes (FDP) during the year (Professional Development Programmes, Orientation / Induction Programmes, Refresher Course, Short Term Course etc.)

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

240

File Description	Documents
IQAC report summary	<u>View File</u>
Reports of the Human Resource Development Centres (UGCASC or other relevant centers)	<u>View File</u>
Upload any additional information	<u>View File</u>
Details of teachers attending professional development programmes during the year (Data Template)	<u>View File</u>

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

Institute has systematic performance appraisal system to assess the performance of teaching and non-teaching staff. The teaching staff appraisal comprises three categories such as HOD appraisal, peer appraisal and self appraisal.

#### **HOD Appraisal:**

The following factors have been selected for HOD appraisal to reflect the basic core competencies to assist the performance of all staff members.

- 1. Teaching skill and knowledge
- 2. Research and Consistency activities
- 3. Faculty has control and maintains discipline
- 4. Extra efforts for weak students

#### Peer Appraisal:

All the faculties are rated by their colleagues and the highlights of the peer appraisal to assess the professionalism are reproduced below:

- 1. Submits departmental reports on time
- 2. Adheres to departmental and college policies
- 3. Participates in departmental and campus wide activities
- 1. Co curricular activities

#### Self Appraisal

Each and every faculty member completes the selfappraisal procedure every year in the prescribed format.

- 1. Results
- 2. Training attended
- 3. Paper publications in indexed journal
- 4. Funded projects/ /Consultancy / Award and patents
- 5. Quality of the projects

#### Non - Teaching Staff

The accountability and involvement of non - teaching staff are also assessed by the components

- 1. Task Execution
- 2. Skill upgradation
- 3. Higher Studies
- 4. Work Discipline & Maintenance

File Description	Documents
Paste link for additional information	https://stjosephs.ac.in/NAAC/AQAR%202020-202 1/6.3.5.pdf
Upload any additional information	<u>View File</u>

#### 6.4 - Financial Management and Resource Mobilization

6.4.1 - Institution conducts internal and external financial audits regularly Enumerate the various internal and external financial audits carried out during the year with the mechanism for settling audit objections within a maximum of 200 words

#### Internal audit:

The institution has a well-defined mechanism to review the handling of funds. The scrutinizing and sanctioning of budget is well defined and transparent. All the department and administrative in-charges submit the annual budget to the Principal for scrutinizing, then forwarded to the Chairman for approval. The approved budget is communicated to the in-charges in order to prepare their monthly monthly budget is reviewed along with the expenditure budget. The incurred during the previous month in the budget meeting presided by the Chairman. The budget meeting is held during last Monday of every month. The annual income and expenditure statement is submitted by all department and administrative in-charges to the Principal for reviewing and it is forwarded to the Chairman. Each department incharges, administrative in-charges, accounts department, and the Principal office maintain appropriate records of their budget, income and expenditure statement. The accounts department keeps the record of all the expenditures after the verification of vouchers and bills.

#### External auditing

Statutory auditing norms are fulfilled by the Institution. The annual financial statement is duly audited and certified by a Chartered Accountant at the end of every financial year. The auditor's report for the financial year is thereafter prepared by the Chartered Accountant. These procedure shows the transparency being maintained in financial matters. Reflecting the Institutions true and fair views in the financial position, operating expenses, and cash inflows.

File Description	Documents
Paste link for additional information	https://stjosephs.ac.in/NAAC/AQAR%202020-202 1/6.4.1.pdf
Upload any additional information	<u>View File</u>

### 6.4.2 - Funds / Grants received from non-government bodies, individuals, philanthropers during the year (not covered in Criterion III)

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

0

File Description	Documents
Annual statements of accounts	No File Uploaded
Any additional information	No File Uploaded
Details of Funds / Grants received from of the non- government bodies, individuals, Philanthropers during the year (Data Template)	<u>View File</u>

### 6.4.3 - Institutional strategies for mobilization of funds and the optimal utilization of resources

#### Mobilization of funds

The institution mobilizes the funds through the student fees who are admitted as per regulations laid by Tamil Nadu Government Higher Education. Another source of fund is through the internal revenue that is the interest obtained from deposits of fund. The other sources include: Workshop, Training & Consultancy, Participation fee in various conferences, seminars organized by the Institution, Establishment of Industry sponsored lab, and Research Project grants.

The financial resources obtain from other sources are utilized for their respective activities.

#### Utilization of funds

The fund is optimally utilized for the Students, Staff, laboratory, infrastructure, Library, etc. The fund is utilized for students

activities such as organizing symposium, the winners of technical symposium attended in other colleges are provided with TA/DA and registration fee, placement training and development programs, value added courses, trust awards, cash award for rank holders, achiever's day, guest lecturers and industrial visits.

The budgeted fund is utilized for purchase and maintenance of equipment and machines in the laboratory. The purchase of equipment's, machines and software is done with an efficient team, Purchase Committee, comprising of six senior faculties. Further, the fund is used for the payment of salary towards teaching, nonteaching staff and administrative staff. The management also supports the staff by providing registration fee for attending conferences, workshop, FDP and other technical events. The fund is also used for the purchase of online journals, magazines, text books and reference books. Further, the Institution spends for the improving the infrastructure facilities such as classroom, laboratory, hostel, library, transport, etc. Therefore, the institution utilized the fund in an optimal way to provide a better environment for the students and staff both teaching and nonteaching.

File Description	Documents
Paste link for additional information	https://stjosephs.ac.in/NAAC/AQAR%202020-202 1/6.4.3.pdf
Upload any additional information	<u>View File</u>

## 6.5 - Internal Quality Assurance System

6.5.1 - Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing the quality assurance strategies and processes

Training and Placement Activities;

The Training and placement cell of St. Joseph's College of Engineering plays an integral role in guiding the students achieve their career goals. The Centre facilitates the training activities with the help of industry experts, alumni and corporate trainers to prepare the students industry-ready. The Centre collaborates with some of the best organizations across industries to provide oncampus job opportunities. As the students excel in their career life, St. Joseph's has always been a much favoured talent hunting ground for the corporate world. As a result, St. Joseph's has been acknowledged as one of the best institutions and has received the

award from the National Employability Award by SHL(Aspiring Minds) for being among Top 10% National Level Engineering Campuses.

#### Students Achievements

Achievement is associated with the targeted goals or aims in life. When we define our action in relation to something like a goal a task is created. A task when fulfilled is called an achievement earned. Our students are participated many national level competitions and bagged many awards and recognitions, a few of them are National Level Hackathon All India level Technical Blog Writing Competition, Institute of scholars awarded the project based on Novelty and contribution towards the society.

File Description	Documents
Paste link for additional information	https://stjosephs.ac.in/NAAC/AQAR%202020-202 1/6.5.1%20(a)%20Amcat%20Award.pdf, https://s tjosephs.ac.in/NAAC/AQAR%202020-2021/6.5.1%2 0(b)Students%20Achievements-2021.pdf
Upload any additional information	<u>View File</u>

6.5.2 - The institution reviews its teaching learning process, structures & methodologies of operations and learning outcomes at periodic intervals through IQAC set up as per norms and recorded the incremental improvement in various activities

The Following procedures are followed to achieve continuous improvement in the Academics:

Use and enrichment of ICT infrastructure

IQAC always encouraged teachers to utilize these tools in academic and laboratories. Practical sessions in laboratory courses, as well as end-of-semester project work, are used to provide students with experience learning opportunities. Student centric participative learning methods include presentation of Technical seminars by students on topics related to curricula and working towards innovative project awards at State and National level. In addition

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to this students involve themselves in making working models and exhibits to be showcased during inter-collegiate symposia. Our institution has student's chapters namely SAE, ISHARE, ASHRAE, IEEE, ISTE, OSA, BRSI, ICI, CSI and IWS which facilitate students to participate in project contest involving hands on learning

Evaluation of teachers by students:

The institution has a feedback system to evaluate the teachers by students. The regular evaluation of feedback on teaching methodologies, course delivery, attitude, difficulties faced in the subject give a clear idea about the problems faced by the students. Feedback is properly analyzed and shared with the Principal, Dean, HODs and individual faculty members. The teaching-learning processes are reviewed, and improvements implemented, based on the IQAC recommendations

File Description	Documents
Paste link for additional information	https://stjosephs.ac.in/NAAC/AQAR%202020-202 1/6.5.2%20Student%20Satisfaction%20Survey%20 2021.pdf
Upload any additional information	<u>View File</u>

6.5.3 - Quality assurance initiatives of the institution include: Regular meeting of Internal Quality Assurance Cell (IQAC); Feedback collected, analyzed and used for improvements Collaborative quality initiatives with other institution(s) Participation in NIRF any other quality audit recognized by state, national or international agencies (ISO Certification, NBA)

A. All of the above

File Description	Documents
Paste web link of Annual reports of Institution	https://stjosephs.ac.in/IQAC/Annual%20Report %202020-21%20final.pdf
Upload e-copies of the accreditations and certifications	<u>View File</u>
Upload any additional information	<u>View File</u>
Upload details of Quality assurance initiatives of the institution (Data Template)	<u>View File</u>

#### INSTITUTIONAL VALUES AND BEST PRACTICES

## 7.1 - Institutional Values and Social Responsibilities

7.1.1 - Measures initiated by the Institution for the promotion of gender equity during the year

St. Joseph's College of Engineering's policy guidelines for admission, recruitment, and administrative function safeguard the interests of the students, faculty and staff members without any gender differentiation.

The following measures are strictly practiced to prevent the occurrence of social issues pertaining to gender sensitivity. The academic ambience of the college promotes sensitivity and respect for each other. All programs offered by the college are common to all- irrespective of genders without any bias or reservation. A gender friendly classroom environment and its overall management build harmonious relations between boys and girls. Equal participation of boys and girls in teaching learning process is ensured with allocation of responsibility of organizing technical events equally to both boys and girls.

The institution aims to groom students to be self-reliant, specialists in their chosen discipline, effective communicators, respectful of different cultures, socially responsible, aware of their social and civic responsibilities, sensitive to gender issues with zero tolerance towards sexual harassment, women safety and security, and environmental consciousness.

College makes efforts to maintain gender balance among the faculty members with more than 50% of female proportion. Similarly, the numbers of women in the housekeeping departments are also high. All new faculty recruits undergo an induction program to understand the

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needs, concerns and characteristics of diversified people including women in the campus. The college ensures the participation of women students in intra and inter-institutional competitions and cultural activities. They are active members of cultural and sports and participate in District, University, State, and National and International level of competitions.

File Description	Documents
Annual gender sensitization action plan	https://stjosephs.ac.in/NAAC/AQAR%202020-202
	1/7.1.1%20Annual%20gender%20sensitization%20 action%20plan.pdf
Specific facilities provided for women in terms of:a. Safety and security b. Counseling c. Common Rooms d. Day care center for young children e. Any other relevant information	https://stjosephs.ac.in/NAAC/AQAR%202020-202 1/7.1.1%20Facilities%20provided%20for%20wome n.pdf

7.1.2 - The Institution has facilities for alternate sources of energy and energy conservation measures Solar energy Biogas plant Wheeling to the Grid Sensorbased energy conservation Use of LED bulbs/power efficient equipment

B. Any 3 of the above

File Description	Documents
Geo tagged Photographs	<u>View File</u>
Any other relevant information	<u>View File</u>

7.1.3 - Describe the facilities in the Institution for the management of the following types of degradable and non-degradable waste (within 200 words) Solid waste management Liquid waste management Biomedical waste management E-waste management Waste recycling system Hazardous chemicals and radioactive waste management

#### Solid waste Management:

- All departments and classrooms are provided with dustbins for dry wastage which are emptied every evening. Segregation of waste from dustbins is done regularly.
- From the kitchen and mess the food waste is collected and given to authorized agents for further processing.

# Liquid Waste Mangement:

- The College posses Sewage Treatment Plant to treat waste water more than 2,00,000 litres /day that are received through the underground pipe lines. The filtered water is pumped to the entire college garden through overhead tank and sprinkles.
- Special Bio-chemical wastes are disposed only after decontamination standard procedures.

#### E-waste management:

- Most of the new electronic instruments and computers are purchased under 'Buy Back Scheme' so that we do not accumulate e-waste.
- All electronic equipment used in the campus are maintained and repaired to ensure minimum e waste.
- UPS Batteries are recharged and repaired by the suppliers.

### Waste recycling system:

- The water after the purification process is used for gardening.
- The one side printed papers used for further use, waste note books collected to use the note pads.
- The usable electronic components are used as spares for repair.

We don't have any Biomedical waste, Hazardous chemicals and radioactive wastes in our campus

File Description	Documents
Relevant documents like agreements / MoUs with Government and other approved agencies	<u>View File</u>
Geo tagged photographs of the facilities	<u>View File</u>

7.1.4 - Water conservation facilities available in the Institution: Rain water harvesting Bore well /Open well recharge Construction of tanks and bunds Waste water recycling Maintenance

A. Any 4 or all of the above

# of water bodies and distribution system in the campus

File Description	Documents
Geo tagged photographs / videos of the facilities	<u>View File</u>
Any other relevant information	<u>View File</u>

# 7.1.5 - Green campus initiatives include

# 7.1.5.1 - The institutional initiatives for greening the campus are as follows:

- A. Any 4 or All of the above
- 1. Restricted entry of automobiles
- 2. Use of bicycles/ Battery-powered vehicles
- 3. Pedestrian-friendly pathways
- 4. Ban on use of plastic
- 5. Landscaping

File Description	Documents
Geo tagged photos / videos of the facilities	<u>View File</u>
Various policy documents / decisions circulated for implementation	<u>View File</u>
Any other relevant documents	<u>View File</u>

# 7.1.6 - Quality audits on environment and energy are regularly undertaken by the institution

7.1.6.1 - The institutional environment and energy initiatives are confirmed through the following 1.Green audit 2. Energy audit 3.Environment audit 4.Clean and green campus recognitions/awards 5. Beyond the campus environmental promotional activities

A. Any 4 or all of the above

File Description	Documents
Reports on environment and energy audits submitted by the auditing agency	<u>View File</u>
Certification by the auditing agency	<u>View File</u>
Certificates of the awards received	<u>View File</u>
Any other relevant information	<u>View File</u>

7.1.7 - The Institution has disabled-friendly, barrier free environment Built environment with ramps/lifts for easy access to classrooms. Disabled-friendly washrooms Signage including tactile path, lights, display boards and signposts Assistive technology and facilities for persons with disabilities (Divyangjan) accessible website, screen-reading software, mechanized equipment 5. Provision for enquiry and information: Human assistance, reader, scribe, soft copies of reading material, screen reading

A. Any 4 or all of the above

File Description	Documents
Geo tagged photographs / videos of the facilities	<u>View File</u>
Policy documents and information brochures on the support to be provided	<u>View File</u>
Details of the Software procured for providing the assistance	<u>View File</u>
Any other relevant information	<u>View File</u>

7.1.8 - Describe the Institutional efforts/initiatives in providing an inclusive environment i.e., tolerance and harmony towards cultural, regional, linguistic, communal socioeconomic and other diversities (within 200 words).

We believe in unity in diversity that's why our students respect the different religion, language and culture. We feel the college is our second home and all faculties like a family member. We greet and wish each other at different festivals and invite them to have a feast to get introduced with ones culture to have amicable relations

and to maintain the religious, social and communal harmony. In this celebrations students wore the different attire representing the different states, religions and cultures. Through this activity students get acquainted with the different culture of our nation and help to develop the tolerance and harmony towards cultural, regional, linguistic, communal socioeconomic and other diversities. This also creates the inclusive environment in the college and society.

The Institutional initiatives towards cultural tolerance and harmony, regional, linguistic, communal socioeconomic and other diversities, includes the conduction of community based celebrations such as Onam, Deepavali, Christmas, Ifthar etc.

Our Social Cohesion activities includes various events towards providing computer literacy, Village cleaning and hygiene drives and COVID awareness programmes etc.

In addition to the above the programmes that imparts the national values such as Teachers day, Independence day and Republic day also been conducted regularly.

File Description	Documents
Supporting documents on the information provided (as reflected in the administrative and academic activities of the Institution)	<u>View File</u>
Any other relevant information	<u>View File</u>

7.1.9 - Sensitization of students and employees of the Institution to the constitutional obligations: values, rights, duties and responsibilities of citizens

Celebration of Independence Day:

The Independence Day (Aug 15) is celebrated in a befitting way with flag hoisting at the campus. This will be followed by the short meeting which reminds about the value of the freedom and the pain that the freedom fighters undergone. This will also be occasion to remember the soldiers and all those who protected the freedom of the country and democracy till this day.

Celebration of Republic Day:

The Republic Day (Jan 26) is celebrated in a befitting way with flag hoisting at the campus. The deliberation about the importance of republic status and the threats on the sovereignty of the Indian subcontinent, the role of cherishing the constitutional obligations, the status of India amidst the other countries etc.

Celebration of Gandhi Jayanthi- Swatchhta Pakhwada:

The Oct 2nd is celebrated in the campus. The students and inmates are encouraged to participate in the cleaning programs organized as per the direction of the swatchhta Pakhwada.

File Description	Documents
Details of activities that inculcate values; necessary to render students in to responsible citizens	https://stjosephs.ac.in/NAAC/AQAR%202020-202 1/7.1.9%20Details%20of%20activities%20that%2 0inculcate%20values.pdf
Any other relevant information	https://stjosephs.ac.in/NAAC/AQAR%202020-202 1/7.1.9%20Any%20other%20relevant%20information.pdf

7.1.10 - The Institution has a prescribed code of conduct for students, teachers, administrators and other staff and conducts periodic programmes in this regard. The Code of Conduct is displayed on the website There is a committee to monitor adherence to the Code of Conduct Institution organizes professional ethics programmes for students, teachers, administrators and other staff

4. Annual awareness programmes on Code of Conduct are organized

A. All of the above

File Description	Documents
Code of ethics policy document	<u>View File</u>
Details of the monitoring committee composition and minutes of the committee meeting, number of programmes organized, reports on the various programs etc., in support of the claims	<u>View File</u>
Any other relevant information	<u>View File</u>

# 7.1.11 - Institution celebrates / organizes national and international commemorative days, events and festivals

### Teachers' Day

Sept 5th is celebrated as the teachers day every year. This event is organized by the students and they admire their teachers support and acknowledge the need for their blessing in their prosperity. They not only wish their teacher individually, but even make the celebration where they respect all the staff. The college management personals also join with student community to honour the teachers and appreciations will be made during the meeting. The students entertained their respective department's faculty members with unique shows on that special day. Our Management gave gifts to all the teachers of our college as a token of appreciation.

## Republic Day

The Republic Day (Jan 26) is celebrated in a befitting way with flag hoisting at the campus. The deliberation about the importance of republic status and the threats on the sovereignty of the Indian subcontinent, the role of cherishing the constitutional obligations, the status of India amidst the other countries etc.

### Celebration of Gandhi Jayanthi- Swatchhta Pakhwada:

The Oct 2nd is celebrated in the campus. The students and inmates are encouraged to participate in the cleaning programs organized as per the direction of the swatchhta Pakhwada.

# Vinayaka Chathurthi

Our college celebrated Vinayaka Chathurthi on 17th September 2021, by decorating Ganesha's statue of our college temple with

flowers. Pooja was grandly performed in the temple in the presence of our beloved Chairman's family. Delicious food was offered to the Lord and Kozhakatai was distributed to the students. Many students came forward to participate on that occasion filled with all blessings of Ganesha.

### Ayudha Pooja

Our College celebrated Ayudha Pooja on 13th October 2021, by arranging Kolu for 9 days in our college from the day of Mahalaya Amavasya till Vijayadasami. On this special day, all the Laboratories and Office were beautified with plantain trees, mango leaves and glazing papers followed by a pooja in the presence of Chairman's family. The remarkable part of this celebration was the mouth-watering lunch, sweets and ice creams that were served for all the students and staff. Gift vouchers for deepavali were distributed on the day of Ayudha pooja to Administrative staff, Technical staff, Non-Technical staff, Drivers, Sweepers, workers in the mess and daily wage workers.

File Description	Documents
Annual report of the celebrations and commemorative events for the last (During the year)	<u>View File</u>
Geo tagged photographs of some of the events	<u>View File</u>
Any other relevant information	<u>View File</u>

#### 7.2 - Best Practices

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

Best Practice 1

Title of the Practice

St. Joseph's measures towards creating better Learning Ambiance for Student community during lockdown period

Objectives of the Practice

To engage college and school level students through various virtual activities and competitions aiming to impart Engineering awareness, Problem solving skill, Aptitude enhancement, Presentation skill,

Puzzle solving skill and to provoke other inherent qualities of an individual

#### The Context

Current COVID outbreak and subsequent Lockdown made our student community 'inert' by both physically and mentally. This problem is more realized currently because this lock down is trying to be a hurdle in the process of continuous learning of teachers and students.

By understanding this current crux of pandemic, our institution has provided high priority to student community learning and made them abreast with current online trends and not allow them to lose their interest in the subject. The entire student community were targeted and engaged them through various virtual activities and competitions.

#### The Practice

In order to drive away the shyness among rural dwelling students and bring them to forefront in demonstrations and competitions, our college has formulated various technical clubs among students, where the students themselves are forming groups and do the co-curricular and extracurricular activities under the guidance of staff members. St. Joseph's College of Engineering in collaboration with the IEEE Students Branch Chapter had taken steps to provide a wider knowledge of emerging technologies internationally.

These kind of activity-oriented learning makes the minds busy and well-tuned towards productive learning and not being idle. School Students with a strong mind would explore better higher education thus an early college awareness is a key step to raise their aspirations to access opportunities. This noble act would have initiated a mass movement among school students towards engineering awareness to rightly plan their future career.

### Evidences of Success

# NATIONAL LEVEL QUIZ COMPETITION:

As a part of the 74th Independence Day Celebrations, IEEE Student
Branch Chapter of St. Joseph's College of
Engineering conducted a 'National level Quiz Competition' for the
remembrance of our Indian History with different types of questions
on the date between 15th August to 22nd August 2020. The quiz theme

consists of our Indian history.

#### JAW BREAKERS:

A special program named 'Jaw Breakers' were designed conduced for 10 days for the participants from various Schools, Colleges and Institutions with an overall aim of Tongue Twister aided Language development and Vocabulary knowledge boost in day to day life. Events like this helped the entire student community to relax their mind and engage in useful activities that help people to get away from the negativity of pandemic situation.

#### QUIZ FEST:

Quiz fest Event was organized for 18 Days for 12th Standard students and Diploma Students from various schools & Colleges. Quiz on various topics includes sports, current affairs, global warming, landmark, science, mathematics, space, technology & development, global warming, history of India, Inventors & inventions, landmark, Planets, corona awareness respectively.

#### EPOCH 3:

It was the School student's webinar were conducted (through Google Meeting), for 6 days in the month of July 2020. The remarkable topics were as follows

- 'Emotional Intelligence' which is the ability to understand, use, and manage your own emotions in positive ways to relieve stress, communicate effectively, empathize with others, overcome challenges and defuse conflict Social awareness etc.
- 2. 'Obstacles needed to be faced for a successful life' it's a case study in which how successful people approach problems and whereas others see impenetrable barriers, they see challenges to embrace and obstacles to overcome etc.
- 3. 'Nanotechnology' it's the engineering of functional systems at the molecular scale which covers both current work and concepts that are more advanced.
- 4. 'Traditional cultural Methods and its uses' The South Indian Culture towards essentially the celebration of the eternal universe through the celebration of the beauty of the body and femininity. It is exemplified through its dance, clothing, and sculpture South India is a heterogeneous combination of culturally and linguistically different people.
- 5. Discipline in Students Life Discipline brings stability and structure into a person's life. It teaches a person to be

responsible and respectful. The observance of well-defined rules is the basis of society. It promotes good human behavior to better society and make it a more enjoyable place for everyone to live

#### SUDOKU:

The Sudoku Game was organized for 13 days in the month of July and August 2020 for the participants from various Schools, Colleges. The participants had enjoyed solving the puzzle. Events like this helped the people to relax their mind and engage in useful activities that also helped people to get away from the negativity of pandemic situation.

Problems encountered and Resource required

The success of any program lies on its method of implementation. That too the online events were special in its implementation by means of the following factors

- Meticulous planning and scheduling were required and it had to be communicated well in advance through all sorts of media platforms.
- 2. A well-defined online platform was needed and the operational difficulties if any, were need to be well educated to the users in advance, in order to avoid any sort of technical delay.
- 3. A user-friendly method had to be adopted in every stage of implementation, since the target audience were with varied technical background and knowledge.
- 4. A high-speed internet connectivity had to be ensured from the host end and the same is expected from the user end.
- 5. Often the participants from the rural areas were dependent only on mobile based network which had created slanginess in video conferencing and presentation.

Thus, the above best practice of St. Joseph's College of Engineering, proved an effective special method of keeping good learning habit and harnessing the individual skills towards betterment of their personality development and career enhancement.

Best Practice 2

Title of the Practice

St. Joseph's measures on COVID Awareness and Rehabilitation

## Objectives of the Practice

To educate the needed sector of community towards COVID pandemic spread and various precautionary measures to curtail the infection and also to extend support and contributions towards their livelihood during pandemic lockdown period.

#### The Context

St. Joseph's College of Engineering is a place of knowledge and virtues. The Students and Faculty of our college are keen and focused towards their contribution to the societal welfare. It's a renowned fact that the Society will emerge to be a better healthy place only if the children of under-privileged are provided with the best of the knowledge on health education and hyenine practices.

The current COVID pandemic has thrown the livelihood of lakhs into a chaotic twister. We the St. Josephites are dedicated with the motto of imparting awareness about currently pandemic outbreak and especially to women and under privileged rural school children and to offer support to regain their livelihood.

### The Practice

St. Josephs, had formulated teams for the purpose of making COVID awareness and rehabilitation with the composition of volunteering teaching and non-teaching staffs from various departments, students and associating NGO members etc.

These volunteering teams had successfully conducted Safety and Hygiene programs and campaigns in the adopted rural villages. It had conducted an initial survey about the needs of the targeted locality and accordingly the services such as cleaning the surroundings, common places were performed.

Apart from the above rural village services, during the period of National lockdown, through online mode, the virtual activities were conducted for the past 8 months for the society in making awareness about infections and containment measures etc.

### Evidences of Success

#### ACTIVITIES THROUGH UNNAT BHARAT ABHIYAN:

St. Joseph's enthusiastically extended support under the National scheme of *Unnati Bharat Abhiyan*, where 80 students along with 6 faculty members have performed a baseline survey completed and uploaded in UBA portal, regarding the lifestyle and basic requirements of adopted villages at Kanchipuram. The team had discussions with Kanchipuram *Tahsildar* and revenue Inspectors regarding UBA Baseline survey and with their consent, the students had conducted Gram Sabha meetings with villagers and administrative peoples and narrated the importance of hygiene and keeping our environment pollution free etc.

#### DISTRIBUTION OF SANITIZER TO ENSURE HYGENE:

Keeping every place of the adopted villages clean and hygiene is the primary motto of our management since it is related to the health of the community. To meet this requirement, we had regular distribution of indigenous manufactured 'Detergent based soap liquid sanitizer' towards the usage of village cleaning purposes without any commercial commitment. The formula and SOP for manufacturing were developed by our expert faculty team. In addition to village cleaning, on a daily basis this liquid sanitizer was distributed to the in-house housekeeping and Maintenance staff for Cleaning, laboratories, library, Mess halls, Administrative and placement block etc.

#### DISTRIBUTION OF GROCERY AND OTHER ESSENTIAL GOODS:

Our Institutions had stepped into contribution of the poor and needy daily wages, foot path vendors and migrant laborer whose livelihood was sniffled out by the lockdown. A pack containing essential cooking items such as 5kg rice, 1kg dhal, 1 liter of cooking oil and other groceries were distributed. Using our college vehicles, these food materials have been donated to various parts of Chennai and other districts. By joining hands with the Government of Tamil Nadu, our institution has enlightened more than 10,000 families by distributing groceries worth more than 50 lakhs rupees.

### CREATING COVID AWARENESS THROUGH ONLINE MODE:

The current outbreak of pandemic infection and subsequent lockdown measures, were not a limiting factor for our institution from reaching the school students. Through online mode, the virtual activities were conducted towards making awareness about infections and containment measures etc.

To main focus of these programs were towards the scope in the

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engineering world for environmental and social issues & Woman welfare, finding solutions for pandemic situation through electronics, Sanitization and Sterilization, Protective Equipment, Crowd management assistive systems, Technologies for Health care & Medical Diagnosis and Apps usage etc.

Through online mode there were several school programs conducted in terms of Competitions, Challenges, Seminars and Workshops by keeping the motto of COVID awareness and safety. We had organized online events exclusively for 11th,12th and Diploma students by the OSA student chapter under the topic of Online Challenges for young minds. Students were asked to find solutions for the current pandemic situation Covid-19 through Electronics in terms of Video presentation, PPT and model demonstration through Google Meet.

Our unique, remarkable, social outreach visits to Rural Schools / Orphanage Homes under the banner of 'Vidivelli' have fulfilled their daily needs and also created educational awareness to innumerable number of children through competitions.

For the past 8 months even during current pandemic period, our noteworthy online School programs through Competitions, Challenges, Seminars and Workshops towards COVID awareness and safety, Effective usage of Internet resources, Websites and Apps etc., were appreciated and honored with 'Utkrisht Viswakarma award 2020' by AICTE.

Problems encountered and Resource required

The success of any program lies on its planning and effective utilization of resources and implementation. During March, April and May months there was a rapid spread of pandemic infection in the surrounding which was a tough task for the volunteers to execute the services and supply and reach of other rehabilitation goods to the needy people.

Since lockdown measures have completely hampered the transportation, the act of mobilizing the essential goods to various areas of adopted villages was a big problem. With the prior official permission from State Government of Tamil Nadu, our college transportation facility resources were well utilized for the good supply and mobilization.

During the period of National level complete lockdown, our measures towards of COVID awareness creation had been restricted towards, online mode, targeting the school level children of rural areas.

These measures encountered several technical barriers in terms of sourcing and user-friendly online platforms, high speed internet connectivity, availability of mobile, laptop and other devices at target locations etc.

In spite of these practical issues in implementations, our institution had shouldered the responsibility in provoking COVID awareness, Safety and Hygiene and Supply of essential commodities such as grocery, medicine, gloves, masks and sanitizers etc.

Thus, with the support of our students we had successfully ruled out the fear about COVID infection and taught all the means of preventing it and imparted through Scientific and Technological developments in the young minds about so as to groom them as responsible Engineers of tomorrow.

File Description	Documents
Best practices in the Institutional website	https://stjosephs.ac.in/NAAC/AQAR%202020-202 1/7.2%20Best%20practices%20in%20the%20Instit utional%20website.pdf
Any other relevant information	https://stjosephs.ac.in/NAAC/AQAR%202020-202 1/7.2%20Best%20Pratices.pdf

#### 7.3 - Institutional Distinctiveness

7.3.1 - Portray the performance of the Institution in one area distinctive to its priority and thrust within 200 words

St. Joseph's support to Government Initiatives during COVID Pandemic

To curtail COVID spread, our institution had joined hands with the Government and supported various Government authorities in implementing their schemes against spread and prevention.

COVID Quarantine Centre:

Our college readily responded to Tamil Nadu Health Ministry and provided part of our campus as quarantine center for COVID by providing 500 beds in hostel rooms with bath attachments facility

COVID Awareness programs:

We made group with students, teaching and non-teaching faculty and conducted many campaigns to give awareness to our stake holders and general public. In addition, organized various online webinars with professional doctors in order to throw more light regarding spread of COVID infection.

### Free Engineering education:

In view of recognizing the incomparable services of the COVID frontline workers, our management has decided to give free management quota engineering seats to the deserving wards of the police personals and health personals.

### Campus Initiatives

By joining hands with the Government of Tamil Nadu, our institution had enlightened more than 10,000 families by distributing groceries worth more than 50 lakhs rupees especially to needy daily wages, footpath vendors and migrant laborers whose livelihood was sniffed out by the lockdown.

# Part B

#### **CURRICULAR ASPECTS**

## 1.1 - Curricular Planning and Implementation

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

Effective curriculum delivery is carried out in the Institution through a well-documented approach.

- In accordance with academic schedules given by the university an Academic Calendar encompassing working days schedule, internal assessment examinations, guest lectures, Industrial visits value added courses etc., is prepared every semester.
- Allocation of subjects to the faculty members is done after careful consideration of their subject expertise besides their choice
- Course study material such as lecture notes, question bank, lab manuals are prepared by the allotted faculty members focusing on the outcome based education and Bloom's Taxonomy. These materials are uploaded in the students' portal for their reference. The details of uploading are recorded by the departments and periodically monitored by the Principal.
- Time tables are prepared in advance every semester for theory, tutorial and practical classes based on the, credits as per the curriculum.
- A Comprehensive lesson plan showing the hourly plan of course delivery is prepared for all the subjects by the allotted faculty members.
- The quality of course delivery by the faculty members are periodically monitored through Class Monitoring Committee (CMC) by getting feedback from the students. Any deviations from the lesson plan reported by the students are well addressed by the Head of the Department suitably. A similar procedure is followed for practical classes too.
- Special classes are arranged in the event of any loss of working days or in cases students requiring more practice.
- In order to complement the class room lectures, NPTEL (National Programme on Technology Enhanced Learning) Video lecture sessions relevant to the subjects are arranged periodically for the students.
- In the past five years, 431 Guest lecture on topics

covering recent trends were arranged with experts drawn from academia and industry, additional courses related to the subjects are conducted to the students to facilitate hands on experience on concepts learnt in the class room sessions.

- To supplement the curricular gaps and to prepare them for the relevant industry "value added courses" are conducted with the help of industry experts.
- Effectiveness of course delivery is ascertained also through the performance of students in unit wise internal Assessment examinations besides a comprehensive model examination.
- After each internal assessment examination, a periodic meeting is conducted in the Department with the faculty members to assess the level of understanding of the students on the topics covered.
- Special coaching is provided for the slow learners identified through the above process.
- These steps are followed periodically during every semester to ensure an effective curriculum delivery.

File Description	Documents
Upload relevant supporting document	<u>View File</u>
Link for Additional information	https://stjosephs.ac.in/NAAC/AQAR%202020-2 021/1.1.1%20upload%20log%20book_link%20to% 20be%20created.pdf

# 1.1.2 - The institution adheres to the academic calendar including for the conduct of Continuous Internal Evaluation (CIE)

The institution prepares schedule for every semester well in advance including continuous internal assessment in coherence with the affiliated university. The mark entry post internal assessment is entered in university portal as per the schedule. The internal assessment procedure is listed as follows:

#### Internal Assessment Mechanism

 A Centralized Examination Process is being practiced for all years.

- Assessment schedule is prepared well in advance for every semester and included in academic calendar.
- Automatic generation of Question Paper
- Re-examinations conducted for Genuine Absentees.
- 4 Internal assessment Examination IAE (each for 50 marks) with individual units as portions of each course is conducted. Before the university examination, a model examination (100 marks) for the complete syllabus is being steered. As per university guidelines, the marks of first and second IAE are considered for first cycle entry. 3rd and 4th assessment are considered for 2nd cycle entry of internal marks. Model exam marks are included for internal evaluation in last cycle. Marks secured by students in all these 5 examinations are converted to 20 marks which are provided as internal marks.

#### Procedure of the Evaluation Process

- · Central valuation monitored by Head of the Department
- Uploading Answer Keys in student portal
- Online Mark Entry & Results Analysis.
- Display of Internal assessment marks in department notice board & web portal
- Communicating Results to the parents through SMS

## End Semester examination by ANNA UNIVERSITY

- End Semester Exams Timetable will be notified by Anna University
- Question paper generation and valuation carried out by Anna University
- End semester Exam is conducted for 100 marks. Each student should secure 45 marks out of 100 in each course of external assessment to clear the course apart from Internal Assessment examination. The secured marks are converted to 80 marks and further added with the marks secured in IAE. Final grade for a course is calculated by accounting both internal and external marks for 20 and 80 marks respectively.
- Discrepancies in the University Question paper (if any) are communicated to University.
- Students can get the photocopies of their evaluated answer sheets from university.
- Students can apply for revaluation.
- Students can apply for review of their answer sheets if further needed.

The procedure is carried as per the guidlines of the university and the relevant documents are provided in additional documents.

File Description	Documents
Upload relevant supporting document	<u>View File</u>
Link for Additional information	https://stjosephs.ac.in/NAAC/AQAR%202020-2 021/1.1.2.pdf

1.1.3 - Teachers of the Institution participate in following activities related to curriculum development and assessment of the affiliating University and/are represented on the following academic bodies during the year. Academic council/BoS of Affiliating University Setting of question papers for UG/PG programs Design and Development of Curriculum for Add on/ certificate/ Diploma Courses Assessment /evaluation process of the affiliating University

A. All of the above

File Description	Documents
Details of participation of teachers in various bodies/activities provided as a response to the metric	<u>View File</u>
Any additional information	<u>View File</u>

### 1.2 - Academic Flexibility

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

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

16

File Description	Documents
Any additional information	<u>View File</u>
Minutes of relevant Academic Council/ BOS meetings	<u>View File</u>
Institutional data in prescribed format (Data Template)	<u>View File</u>

# 1.2.2 - Number of Add on /Certificate programs offered during the year

# 1.2.2.1 - How many Add on /Certificate programs are added during the year. Data requirement for year: (As per Data Template)

18

File Description	Documents
Any additional information	No File Uploaded
Brochure or any other document relating to Add on /Certificate programs	<u>View File</u>
List of Add on /Certificate programs (Data Template )	<u>View File</u>

# 1.2.3 - Number of students enrolled in Certificate/ Add-on programs as against the total number of students during the year

1195

File Description	Documents
Any additional information	<u>View File</u>
Details of the students enrolled in Subjects related to certificate/Add-on programs	View File

# 1.3 - Curriculum Enrichment

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

The Institution, has taken up many initiatives over the years which have provided a platform for holistic development ensuring sensitiveness, towards the society.

Environment and Sustainability

- The curriculum includes a subject "Environmental Sciences and Engineering - GE 8291". Most of the engineering streams choose this elective.
- Short term courses that enhance and inculcate remedial practices for issues on environment and sustainability are conducted.
  - Value added Course Wake up call for Solar industry
  - Two Days Workshop: Solar Grid System Design And Sizing Of Essential Component's & Scope For Entrepreneurship
  - Webinar on "Solar and Renewable Energy"
  - Webinar on "Electrical Vehicles charging"
  - Guest lecture on Disaster Management

0

- A paper less environment is encouraged. Usage of the college web portal is preferred.
- The ECO-SOC club was started in 2014 with the main objective of reaching and educating the students about the social, economic and political issues and to motivate quality leaders.
  - Entrepreneur Development cell, Google groups, Quiz club, Tamil Club, Maths club, and English clubfunction wherein activities are organized to develop their creativity, diverse competence and selfconfidence.

Gender Sensitization.

The college which is a co-educational institute sensitizes its staff and students on issues

like gender sensitization and women empowerment.

- Gender equality is maintained at every point. In some streams the ratio of girls is above.
- All girls teams exist, they go out to participate in various competitions and have brought laurels.
- Women's Day is celebrated with enlightening lectures and activities.
- Webinar -"IMPORTANCE OF WOMEN IN ENGINEERING"
- A vibrant IEEE society for "Women in Engineering", functions where activities for women engineers is organized since 2015.
- International Webinar Series for 12 days was organized by the department of EEE with eminent speakers from across the globe

- Awareness Program: "Health Awareness for Women"
- Webinar series on "The female voice at workforce"

#### Professional Ethics

- The university curriculum includes an elective subject titled "Professional Ethics in Engineering - GE8076". Most of the engineering streams choose this elective.
- Professional ethics is imbibed into the student community by the strict regime of discipline that is maintained within the campus. Cheating is strictly curbed, and severe measures are taken up. Punctuality is prioritized.

### Human Values

- Student visit 90 NGO homes, which includes 75orphanages, 10 old age homes and Cerebral palsy (CP) children's homes. The students willingly provide for several basic needs of the inmates. Lunch is served to all the inmates and the students join them and create a feeling of being loved and cared. The students also learn to realize the needs of the inmates. This creates a feeling of empathy with the under privileged of the society.
- A dynamic NSS unit which has a yearly membership of 100 students functions. Every year a village is chosen and the volunteers spend a week doing whatever is the major requirement at that place. They co ordinate with the teachers to arrange for special tuitions, this has improved the performance of the students.
- An active YRC unit exists. Volunteers help in arranging blood donation camps and regularly help the needful.
- During the pandemic various programs were conducted to spread awareness and encouragement
  - Webinar on "Embracing conflicts in the challenging world"
  - Webinar on "Innovation in technology during Covid times"
  - Webinar on "Living with Covid Mutual existence -Way forward"
  - Webinar on "Believe in Yourself and Your Ability"

Every student of the campus blooms with several values embedded, to help them mature as responsible and socially concerned citizens of the human society at large.

File Description	Documents
Any additional information	No File Uploaded
Upload the list and description of courses which address the Professional Ethics, Gender, Human Values, Environment and Sustainability into the Curriculum.	<u>View File</u>

# ${\bf 1.3.2 - Number\ of\ courses\ that\ include\ experiential\ learning\ through\ project\ work/field\ work/internship\ during\ the\ year}$

25

File Description	Documents
Any additional information	No File Uploaded
Programme / Curriculum/ Syllabus of the courses	<u>View File</u>
Minutes of the Boards of Studies/ Academic Council meetings with approvals for these courses	<u>View File</u>
MoU's with relevant organizations for these courses, if any	<u>View File</u>
Institutional Data in Prescribed Format	<u>View File</u>

# 1.3.3 - Number of students undertaking project work/field work/ internships

986

File Description	Documents
Any additional information	<u>View File</u>
List of programmes and number of students undertaking project work/field work//internships (Data Template)	<u>View File</u>

# 1.4 - Feedback System

# 1.4.1 - Institution obtains feedback on the A. All of the above

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# syllabus and its transaction at the institution from the following stakeholders Students Teachers Employers Alumni

File Description	Documents
URL for stakeholder feedback report	https://stjosephs.ac.in/NAAC/EEE%202020-20 21.pdf
Action taken report of the Institution on feedback report as stated in the minutes of the Governing Council, Syndicate, Board of Management	<u>View File</u>
Any additional information	No File Uploaded

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

A. Feedback collected, analyzed and action taken and feedback available on website

File Description	Documents
Upload any additional information	No File Uploaded
URL for feedback report	https://stjosephs.ac.in/NAAC/EEE%202020-20 21.pdf

## TEACHING-LEARNING AND EVALUATION

#### 2.1 - Student Enrollment and Profile

# 2.1.1 - Enrolment Number Number of students admitted during the year

1232

# 2.1.1.1 - Number of students admitted during the year

1232

File Description	Documents
Any additional information	<u>View File</u>
Institutional data in prescribed format	<u>View File</u>

# 2.1.2 - Number of seats filled against seats reserved for various categories (SC, ST, OBC, Divyangjan, etc. as per applicable reservation policy during the year (exclusive of

# supernumerary seats)

## 2.1.2.1 - Number of actual students admitted from the reserved categories during the year

296

File Description	Documents
Any additional information	<u>View File</u>
Number of seats filled against seats reserved (Data Template)	<u>View File</u>

## 2.2 - Catering to Student Diversity

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

To start with their academics, they are initially provided with Bridge courses to freshen up the concepts in Physics, Chemistry and Mathematics. Special Computer Programming courses are given for students particularly from Biology group during their higher secondary education to cope up with the programming and software related courses in the upcoming semesters. To overcome all disputes and barriers in communication, communication skills course is given at the start of first year itself.

Initially all the coaching classes are given common to all the students. After being monitored in terms of performances in their Internal Assessment Examinations, Model Exam and First Semester University Examinations, they are categorized as advanced learners and slow learners.

When it comes to the lateral entry students, they have patch up courses for all the subjects in third semester and particularly Mathematics coaching classes as they are deficient in concepts of Engineering Mathematics - I and Engineering Mathematics - II.

Apart from regular classes the slow learners are given additional coaching during exams and special coaching during their semester study holidays for courses including their lower semester arrear courses.

Adding to these regular practices, we have a system called mentoring, where each faculty is attached with some 10-15 students, who maintains a record of those students performance in their Examinations along with biodata and continuously monitors them and keep track of their growth. More than mentors, we also

have Domain in-charges for Advanced, Average and Slow Learners who are the motivational vibes such that the slow learners are motivated to shine in academics and get through without any back logs; the average learners are motivated to score higher grades; the advanced learners are motivated to get University Ranks and think beyond their curriculum.

We also have semester starting meeting for every semester called orientation program explaining the semester's need, expectation and various training programs and courses involved in that semester. At the Closing of the semester, HOD along with the Advisory Board Members meet the students motivate them for their University Examinations.

For the advanced learners, Student clubs, Student chapters like IEEE with 500 members and societies like Computer society, OSA, Robotics and automation society, Power electronics society and various others, enable students to innovate and participate in various competitive events. Competent students are fully sponsored to carry out innovative socially relevant projects in competitions like Hackathan (5 problems are addressed and selected in AICTE - MHRD officials as One among 330 International students from 10 different ASEAN countries ), INAE (2 awards received), Coaching classes for competitive exams such as GATE, GRE, TOEFL, CAT, Defense and Civil service Examinations are provided during the this year(109 / 197 Students are cleared Competitive exams). They undertake special placement drive training by recruiters themselves and other leading training organizations every year. Workshops on real-time concepts are conducted as per their interest and need. In addition Seminars and guest lectures are conducted regularly in their concern field of interest, equipping them with sound knowledge and keep in track of the trend in technology.

File Description	Documents
Paste link for additional information	https://stjosephs.ac.in/NAAC/AQAR%202020-2 021/2.3.1.xlsx
Upload any additional information	<u>View File</u>

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

Number of Students	Number of Teachers
5077	302

File Description	Documents
Any additional information	<u>View File</u>

# 2.3 - Teaching- Learning Process

2.3.1 - Student centric methods, such as experiential learning, participative learning and problem solving methodologies are used for enhancing learning experiences

Our institution takes efforts to make teaching learning process students centric by adopting various suitable learning methodologies. Students are made to have experiential learning partly through curriculum itself by imparting practical sessions in laboratory courses besides end semester project work. Apart from this, students are encouraged to make models to consolidate their learning in the class room. Students in pre-final year made to carry out mini-projects to have more experiential learning.

In addition value added courses are arranged with industrial experts to give hands on exposure to the latest technologies. Every semester students are taken for Industrial visits in the relevant companies to gain exposure to industrial practices. Student centric participative learning methods include presentation of Technical seminars by students on topics related to curricula and working towards innovative project awards at State and National level. Projects carried out by the students are scrutinized at department level and shortlisted to be nominated for best project awards. In addition to this students involve themselves in making working models and exhibits to be showcased during inter-collegiate symposia.

Our institution has student's chapters namely SAE, ISHARE, ASHRAE, IEEE, ISTE, OSA, BRSI, ICI, CSI and IWS with 13 professional societies which facilitate students to participate in project contest involving hands on learning. Tutorial classes form part of the course delivery to inculcate problem solving skills among the students to supplement regular teaching learning process. Laboratories are well equipped with internet facility which enables students to self-learn and widen their learning skills through problem solving. The problem solving ability is further honed by incorporating questions on case studies in the internal assessment examinations.

In addition students participate in National level competitions such as Smart India Hackathon contest where 5 problems are addressed and selected in AICTE - MHRD officials as One among 330 International students from 10 different ASEAN countries, AICTE Chathra Viswakarma awards (2 awards), DRDO, MSME certified trainings, various competitions conducted by companies Titan, Nokia, Cognizant, Amazon, etc. The students register for online NPTEL Certificate courses (around 1000 students are registered), Coursera (380 Students) so that they can gain knowledge in addition to their regular curriculum. Students are also encouraged to do coding

File Description	Documents
Upload any additional information	<u>View File</u>
Link for additional information	https://stjosephs.ac.in/NAAC/AQAR%202020-2 021/2.2.1.xlsx

# 2.3.2 - Teachers use ICT enabled tools for effective teaching-learning process. Write description in maximum of 200 words

The applicability and adoptability of innovative and creative methods of Teaching-Learning process has high potential value in improving education, empowering employability and achieving goals of human that contribute to the nation development. Apart from the conventional method of teaching which includes 'chalk and talk', the current and next generation students expect innovative methods of teaching such as multimedia learning process, problem based learning and usage of various multimedia tools for better understanding.

The innovative and creative method of teaching processes highly focuses on attaining the course outcomes and to surge, the students in the right direction to empower themselves and the nation. Various supplemental teaching-learning methods such as smart classes, demonstration classes, PowerPoint presentations, etc., has been utilized along with the regular teaching-learning practice to develop the critical and analytical ability of the students.

Model and Chart presentations are encouraged to enhance the basic understanding of the students in the particular discipline/field area. The contribution of each student is motivated to improve rational interpretations. The students are encouraged to

participate as well as to organize various workshops, conferences, and technical symposiums to extend their knowledge and to impart the leadership qualities in the students. Soft skill training and communication proficiency tests are regularly conducted during odd and even semesters to improve the analytical and reasoning efficiency of the students.

Over 300 Guest lecturers / invited speech are organized to extend the student's knowledge beyond the curriculum. Demo classes and practical oriented classes/hands on training are arranged to strengthen the practical knowledge of the students along with the theoretical knowledge. Other teaching-learning methods such as Group discussions, Jigsaw discussions and Debates are conducted to actively engage the students to analyse the pros and cons of every field of study. Role plays on divergent techniques or process are reproduced by the students on the verge to explore every segment in the techniques/process. Elearning and self-learning process is encouraged within the student group, apart from the other technical methods to develop the self- analysis during the study.

More than 300 subjects of NPTEL lecture notes & videos, 56 technical magazines and 600 online journals are made available to the student society to understand and enlarge their ideas towards the current technical and global affairs. The students are also allowed to carry out mini- and major projects as a part of their academic activities. The students are supported to develop innovative as well as creative materials for the global economy need.

An average of 30 industrial visits per semester is arranged and 175 value added courses are arranged during last five years for the students to extend their knowledge towards the technological activities carried out within the industries. Two-way conversations are preferred to build the students teacher relationship to enhance active learning process.

File Description	Documents
Upload any additional information	No File Uploaded
Provide link for webpage describing the ICT enabled tools for effective teaching-learning process	<u>View File</u>

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

# 2.3.3.1 - Number of mentors

302

File Description	Documents
Upload, number of students enrolled and full time teachers on roll	<u>View File</u>
Circulars pertaining to assigning mentors to mentees	<u>View File</u>
Mentor/mentee ratio	<u>View File</u>

# 2.4 - Teacher Profile and Quality

# 2.4.1 - Number of full time teachers against sanctioned posts during the year

302

File Description	Documents
Full time teachers and sanctioned posts for year (Data Template)	<u>View File</u>
Any additional information	<u>View File</u>
List of the faculty members authenticated by the Head of HEI	<u>View File</u>

2.4.2 - Number of full time teachers with Ph. D. / D.M. / M.Ch. /D.N.B Superspeciality / D.Sc. / D.Litt. during the year (consider only highest degree for count)

2.4.2.1 - Number of full time teachers with Ph. D. / D.M. / M.Ch. /D.N.C	Superspeciality /
D.Sc. / D.Litt. during the year	

147

File Description	Documents
Any additional information	<u>View File</u>
List of number of full time teachers with Ph. D. / D.M. / M.Ch./ D.N.B Super specialty / D.Sc. / D.Litt. and number of full time teachers for year (Data Template)	<u>View File</u>

# 2.4.3 - Number of years of teaching experience of full time teachers in the same institution (Data for the latest completed academic year)

# 2.4.3.1 - Total experience of full-time teachers

#### 3241.7

File Description	Documents
Any additional information	<u>View File</u>
List of Teachers including their PAN, designation, dept. and experience details(Data Template)	<u>View File</u>

# 2.5 - Evaluation Process and Reforms

2.5.1 - Mechanism of internal assessment is transparent and robust in terms of frequency and mode. Write description within 200 words.

The continuous internal assessment system followed in our institution covers the aspects of cognitive learning, demonstrative skills besides attendance criterion. Students are informed about the parameters of internal assessment system well in advance.

The performance of students in the theory subjects is assessed periodically as follows for internal assessment:

Period	Portions of the	Method of	Maximum Marks
	Subjects	Evaluation	
Assessment Period -	Unit I & II	Internal	100
<b> </b>		Examination	
Assessment Period -	Unit III & IV		100
II		Assignment	
		Seminar	
Assessment Period -	All Units (I - V)	Internal	100
Assessment Ferrod -	AII UIIICS (I - V)	Incernar	100

III		Examination	<u> </u>	
111		Examinación		
The total marks obtain	ned in all assess	ment examinations are	put	
together out of 300,				
rounded to the nearest	integer.			
Assignments / Seminar				
subject in turn once :				
students are aimed at		ication, presentation	and	
technical skills of th	ne students.			
For practical subject:	the performance	of students is asso	gged	
periodically as follow		e or scudence is asse	sseu	
periodicari, ab rerre.				
Parameters / Type of 1	Evaluation	Maximum Marks		
Observation, Procedure	e, Design,	10		
Calculation and Prese	ntation of Results	3		
& Graphs				
Viva-voce at the end o	or each experimen			
Regularity of Submiss:	on of Record of			
work				
Model Practical Examin	nation	10		
Total Internal Assess	ment Marks	20		
For Project Work, the	_	tudents is assessed		
periodically as follow	vs:			

Type of Evaluation	Parameters for Evaluation	Maximum Marks
Project Review - I	Problem Definition,	10
	Literature Review,	
	Methodology	
Project Review - II	Extent of Simulation /	1
	Experimental work carried	
	out	
Project Review - III	Presentation of Results &	1
	Conclusions	
Project Review - IV	Demonstration of Project	
	Outcomes	

Model Viva-Voce - I	Draft Rep	ort Submission	10	
Model Viva-Voce - II	Final Rep	ort Submission		
Total Internal Assessment	Marks		20	

Once the examinations are conducted, the answer scripts of students are evaluated centrally, verified by the senior faculty to ensure transparency and distributed back to the students by the teachers within two days of examination. The faculty members discuss with the students the solutions to the all questions given in the examinations during the distribution of answer papers to help them understand their mistakes and note down the corrections. Thus the students are allowed to assess their own work and any modifications, if necessary in the award of marks are carried out. Suggestions are given to the students who need to improve and the ones who performed well are appreciated

File Description	Documents
Any additional information	<u>View File</u>
Link for additional information	
	https://stjosephs.ac.in/NAAC/AQAR%202020-2
	<u>021/2.5.1.pdf</u>

## 2.5.2 - Mechanism to deal with internal examination related grievances is transparent, time-bound and efficient

- Internal assessment examinations are conducted as per the academic calendar provided by the Institution. The Examination office prepares a timetable according to the academic calendar provided by the Institution and the examination office showcases it much prior to the commencement of exams which is mailed to both the staff and students.
- Every grievance at Institution level is clarified instantly. The institution continuously reviews the evaluation process done internally and implements the necessary changes as and when applicable/ required.
- The College has created a grievances redressal committee comprising of heads of the department for the academic Redressal of students' grievances.
- Internal assessment question paper feedback is given by the concerned subject teacher on the day of assessment before the examination for discrepancies and the answer Key is uploaded in the portal.
- To ensure timely needs of students during assessment examinations, frequent visits are made by the Controller of Examinations and various department HoDs. Scrutiny of

- answer scripts is done by the senior faculty and HOD to ensure fairness and transparency of the correction.
- Answer scripts are evaluated and distributed to the students within two days from the date of examination.
- Assessment marks are entered into the portal after the exams and the entries are cross verified by the other department faculties for corrections.
- The end semester examinations are conducted and controlled by the University and if students have any problem, the Principal communicates to the Controller of Exams of the University about the grievances of the students.
- The grievances of the students in external examination at university level are addressed through a proper channel by obtaining photocopies of the evaluated answer scripts, reevaluation and challenge evaluation by paying a prescribed university fee.
- University Question paper feedback is given to the University through proper channel, for the out of syllabus questions and discrepancies by the concerned faculty members

Documents
<u>View File</u>
https://stjosephs.ac.in/NAAC/AQAR%202020-2 021/2.5.2.pdf

#### 2.6 - Student Performance and Learning Outcomes

2.6.1 - Programme and course outcomes for all Programmes offered by the institution are stated and displayed on website and communicated to teachers and students.

St Joseph's College of Engineering offers 11 Under Graduate Programmes, 7 Post Graduate Programmes. Programmes offered are listed below:

#### UG PROGRAMMES

- 1.B.E. Computer Science and Engineering
- 2. B.E. Electronics and Communication Engineering
- 3. B.E. Mechanical Engineering
- 4. B.E. Electronics and Instrumentation Engineering

- 5. B.E. Electrical and Electronics Engineering
- 6. B.E. Civil Engineering
- 7. B.Tech. Information Technology
- 8. B.Tech. Biotechnology
- 9. B.Tech. Chemical Engineering
- 10.B.Tech. Artificial Intelligence and Data Science
- 11. B.Tech. Artificial Intelligence and Machine Learning

#### PG PROGRAMMES

- 1. M.E. Power Electronics and Drives
- 2. M.E. Computer Science and Engineering
- 3. M.E. Applied Electronics
- 4. M.E. Manufacturing Engineering
- 5. M.E. Embedded Systems
- 6. M.Tech. Biotechnology
- 7. M.B.A Master of Business Administration
- 8. M.B.A. Master of Business Administration (Integrated 5 Yrs)

#### **DISSEMINATION**

The programme outcomes, programme specific outcomes and course outcomes of all the programmes are disseminated through following modes

- College website
- Department link of College website
- Orientation programs
- Display boards

- Department magazines
- HOD room
- Department notice boards
- Class rooms
- Faculty rooms
- Laboratories
- Among stakeholders through e-mails transactions
- Various functions such as:
- 1. Alumni meet
- 2. National and International conferences
- 3. Seminars
- 4. Workshops
- 5. Faculty Development Programs

Dissemination of CO, PO & PSO of the Department

S.No	Dissemination				
	То	Ву	Content	Mod	le / Eve
1.	Students	Head of the Department	Course outcomes	1)	Opening
			Programme Outcomes	2)	Departm
		2	Programme Specific Outcomes	3)	Lab Mar
					Questi
2	Parent	Head of the Department	Course outcomes	1)	Orienta
			Programme Outcomes	2)	Departm
			Programme Specific Outcomes	3)	Result
				4)	Departr
					Maga
3	Faculty members of	Course	Course outcomes	1)	Opening
	the Department	Coordinator	Programme Outcomes		Meeti
	& Service Departments		Programme Specific Outcomes		Acade
				2)	Departi
				3)	Course

				4)	Academi
4	External	HOD	Course outcomes	1)	College
	Stake				
	Holders	Placement	Programme Outcomes	2)	News Le
		Officer			
			Programme Specific Outcomes	3)	Placemen

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for Additional information	https://stjosephs.ac.in/department.html
Upload COs for all Programmes (exemplars from Glossary)	<u>View File</u>

2.6.2 - Attainment of Programme outcomes and course outcomes are evaluated by the institution.

Method of measuring attainment of POs , PSOs and COs

The effectiveness of the course outcomes have been justified with the help of Performances made by the student in Internal Assessment and End Semester University examination. The Internal Assessment includes Assessment Examination and Assignments. The end semester examination will be conducted by the university. As per Anna university regulations, the final grade of the course will be calculated considering, 20% weightage for Internal Assessment and 80% weightage for end semester performance.

- 1. Direct Assessment Process
- 1.1 Internal Assessmentfor Theory course
- (a) Assessments

In a semester three Assessments will be conducted

- Assessment I Units I & II (CO1 & CO2 Each 50 marks)
- Assessment II Units III & IV(CO3 & CO4 Each 50 marks)
- Assessment III All 5units (CO1, CO2, CO3, CO4 & CO5-Each 20 marks)

#### (b) Assignments

The students are asked to prepare and submit assignments, prior to Assessments. The assignment shall contain Key points, Neat diagrams, Derivations and Tables or plots.

S.No	Assessment	Marks	Weightage
1	Assessments	100*3	300
2	Assignments	60+60+80	200
	Total		5(
			converted to 10

#### (c) End Semester University examination:

The University exams are conducted by the Anna University for 100 marks as per the format given below:

Part - A (2 mark Questions)

10 \* 2 = 20

Part - B (13 Mark Questions)

5 \* 13 = 65

Part - C (15 Mark Questions)

includes Application/Design/Analysis/Evaluation/Creativity questions

1 \* 15 = 15

Total = 20 + 65 + 15 = 100 marks

#### 1.2. Assessment Process for Practical Courses:

Assessment	Assessment Period	Assessed By	Reviewed By
Method			
Evaluation of	Once per Experiment	Respective	HOD
all the		Faculty Member	
experiments			
Model Exam	Once per Semester		
Additional	Depends upon the course		

Experiments / Mini Projects				
University	Once per Semester	External	Anna Univ	ersity
Examination		Examiners		

#### 1.3 Project Work

- The students are permitted to carry out their projects either in-house or in an Industrial / Research Organization, on the recommendations of the Head the Department.
- There shall be three reviews during the semester by the review committee which are continuously assessed. The project work shall be evaluated at the end of the semester by an internal and university appointed external examiners.

#### 2. Indirect Assessment tools

- Alumni Survey
- Student Feedback
- Parent Feedback
- Student Entry survey
- Student Exit survey
- Industry feedback

SAMPLE ATTAINMENT (Department of Electrical and Electronics Engineering)

#### Level of Attainment:

Target has been arrived based on the average percentage of students scored more than the class average marks in the previous three academic years

Target vs Attainment level for Direct Assessment

% of students scoring above the class average mark in the Direct				
Target	Attainment	Attainment		
	Level 1	Level 2	Level 3	
	Above - Less than	Above - Less than	Above	
55	45-50	50-55	55	
60	50-55	55-60	60	
65	45-55	55-65	65	
70	50-60	60-70	70	
75	55-65	65-75	75	
80	50-65	65-80	80	
i				

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for Additional information	https://stjosephs.ac.in/NAAC/AQAR%202020-2 021/2.6.2.xlsx

#### 2.6.3 - Pass percentage of Students during the year

## 2.6.3.1 - Total number of final year students who passed the university examination during the year

#### 1427

File Description	Documents
Upload list of Programmes and number of students passed and appeared in the final year examination (Data Template)	<u>View File</u>
Upload any additional information	<u>View File</u>
Paste link for the annual report	https://stjosephs.ac.in/IQAC/Annual%20Repo rt%202020-21%20final.pdf

#### 2.7 - Student Satisfaction Survey

2.7.1 - Student Satisfaction Survey (SSS) on overall institutional performance (Institution may design its own questionnaire) (results and details need to be provided as a weblink)

https://stjosephs.ac.in/NAAC/Student%20Satisfaction%20Survey%2020 21.pdf

#### RESEARCH, INNOVATIONS AND EXTENSION

- 3.1 Resource Mobilization for Research
- 3.1.1 Grants received from Government and non-governmental agencies for research projects / endowments in the institution during the year (INR in Lakhs)
- 3.1.1.1 Total Grants from Government and non-governmental agencies for research projects / endowments in the institution during the year (INR in Lakhs)

Fifty four lakhs thirteen thousand two hundred and thirty two

File Description	Documents
Any additional information	No File Uploaded
e-copies of the grant award letters for sponsored research projects /endowments	<u>View File</u>
List of endowments / projects with details of grants(Data Template)	<u>View File</u>

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

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

43

File Description	Documents
Any additional information	No File Uploaded
Institutional data in prescribed format	<u>View File</u>

## 3.1.3 - Number of departments having Research projects funded by government and non government agencies during the year

## 3.1.3.1 - Number of departments having Research projects funded by government and non-government agencies during the year

File Description	Documents
List of research projects and funding details (Data Template)	<u>View File</u>
Any additional information	No File Uploaded
Supporting document from Funding Agency	<u>View File</u>
Paste link to funding agency website	https://stjosephs.ac.in/departmentsite/it new https://www.aicte-india.org/sites/defa ult/files/modrob/MODROB%20Scheme%20Guideli nes.pdf http://www.serb.gov.in/home.php ht tps://icssr.org/research-projectsmajor-and- minor/web/about.html http://www.aicte- india.org/bureaus/administration/scst-cell https://dst.gov.in/

#### 3.2 - Innovation Ecosystem

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

To create an innovative ecosystem in our College we encourage the faculty to file more number of patents, so far we have filed 92 patents from various Departments, out of those 21 patents were granted. To recognise our efforts in Intelluctual Property Rights (IPR) the Centre for Intelluctual Property Rights, Anna University, Chennai has honoured us with an Intelluctual Property Award in the year 2016. Each and every year our staff and students bagged innovative research awards from various agencies including AICTE, INAE, DST, etc.

The Research and Development Centre of St. Joseph's College of Engineering, Chennai, with a objective of providing training to the interested graduates in our College, Rural youth Entrepreneurs and Women self help group, have started a start-up program in our College in association with the help of experts from the Department of Biotechnology. In the month of January 2019, we have started a Mushroom Cultivation centre for giving training in spawn production and mushroom cultivation. The mushroom harvested in the centre caters the need of the College.

To update the knowledge of the students and staff we used to give training in ARM Kit and the hardwares needed for this activity was supplied free of cost by Nuvoton Technology Corporation. We are also organizing workshops/FDPs and conferences funded by various government agencies such as DST, DBT, AICTE, etc.

The ED Cell in the institution is very vibrant and organizes events and workshops regularly to motivate the students and helps in creating an entrepreneurial eco system within the institution

The institution actively participated in the national innovation contest 2020. 95 ideas were approved of which 5 are selected for the first level of evaluation. after the mentoring session 21 proposals were shortlisted for stage 2 evaluation. After multiple rounds of evaluation mentoring and training "Micro level power management systems" by Mr.M.P.Akash was one among the 127 finalist of NIC 2020.

TOYCATHON2021 a National Level Inter- Ministerial initiative wasorganized by Ministry of Educations Innovation Cell in association with AICTE, MSME and Ministry of information and

Broadcasting between 22nd and June 24th June 2021 under "AatmaNirbhar Abhiyan "scheme. The team from our institutions emerged as the winner.

Entrepreneurship Development Institute of India(EDIA) Organized A State Level Project pitch competition Tamil Nadu Students Innovator Award 2020, The details of the winners are:

- 1. Mr.Gokulaprasad P was the Winner (Rs.1,00,000/- Fellowship Award) with the title Smart Health Monitoring System.
- 2. Mr.Akash M.B awarded with the Consolation Prize (Rs.
  10,000/-) for the title Micro Level Power Management System

Six of our faculty members have attended one month Innovation Ambassador training program and Received the completion certificate conducted in the month of June-July 2021. Among this Dr.Jayasreekrishnan, Dr.Lilly Ramesh and Dr.Narmatha have attended Advanced Level. Dr.Chandrasekar, Dr.Ramesh Babu and Mr.S.Aravinth have attended Basic Level.

Department of Electrical Electronics Engineering organized a NISP program for our Students on Opportunities & Challenges for Startups- NISP by Mr.Udayakumar senior member of Technical staff, MITEL Co-founder, Genuine Aspirations part of Entrepreneurs café. on 12th March 2021.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://stjosephs.ac.in/R%20and%20D/Patents%20details.pdf

## 3.2.2 - Number of workshops/seminars conducted on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship during the year

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

8 (2020-2021)

File Description	Documents
Report of the event	<u>View File</u>
Any additional information	No File Uploaded
List of workshops/seminars during last 5 years (Data Template)	<u>View File</u>

#### 3.3 - Research Publications and Awards

#### 3.3.1 - Number of Ph.Ds registered per eligible teacher during the year

#### 3.3.1.1 - How many Ph.Ds registered per eligible teacher within the year

#### 0.86

File Description	Documents
URL to the research page on HEI website	https://stjosephs.ac.in/NAAC/AQAR%202020-2 021/3.3.1.xlsx
List of PhD scholars and their details like name of the guide, title of thesis, year of award etc (Data Template)	<u>View File</u>
Any additional information	No File Uploaded

## 3.3.2 - Number of research papers per teachers in the Journals notified on UGC website during the year

## 3.3.2.1 - Number of research papers in the Journals notified on UGC website during the year

150

File Description	Documents
Any additional information	No File Uploaded
List of research papers by title, author, department, name and year of publication (Data Template)	<u>View File</u>

## 3.3.3 - Number of books and chapters in edited volumes/books published and papers published in national/international conference proceedings per teacher during the year

#### 3.3.3.1 - Total number of books and chapters in edited volumes/books published and papers

#### in national/international conference proceedings year wise during year

140

File Description	Documents
Any additional information	No File Uploaded
List books and chapters edited volumes/ books published (Data Template)	<u>View File</u>

#### 3.4 - Extension Activities

3.4.1 - Extension activities are carried out in the neighborhood community, sensitizing students to social issues, for their holistic development, and impact thereof during the year

There are two unit of NSS in our campus with two Program Officer and 100 student volunteers. The NSS unit of the college is part of the NSS wing of the affiliating University viz. Anna University. The University periodically involves the Program Officers of the colleges under its control for discussion with them about the activities that could be initiated for the betterment of the society at large. The NSS wing of the college conducts programmes in villages around the college to educate the villagers on hygiene & sanitation, literacy, women and their status in the society - how to improve it, the employment opportunities available for the youth of the village, protected water supply system, Dengue awareness, Road safety, Girl's education, awareness of AIDS, ? and "Youth for Mass Literacy", "Youth for National Integration & Social Harmony" etc.

Students stay in the village for about 7 days a year, live with the villagers, refurbish the school buildings, give a patient hearing to the woes of villagers, discuss with them possible remedies, arrange for health check up by doctors, "Youth Red Cross" (YRC) Another unit of YRC with about 30 student members with a corresponding Coordinating Officer is organizing blood donation camps joining hands with different hospitals and organizations.

These have been so successful that the hospitals and Rotary clubs are willing to associate themselves with all such activities of the student community. Non-Government Organization All the students of our institution are visiting one orphanage/ old age home each semester during their study in our institution. Students have an opportunity to do things differently. Our students get opportunities to visit villages and Orphanages and

interact with people one time each semester. They spend some quality time with the children and old age people, by serving food and daily needs of them.

Students were motivated to plant trees and take care of environment, so that they will get social awareness. Also students are encouraged to learn yoga, through which they are gaining self-confidence, good physique etc.

File Description	Documents
Paste link for additional information	https://stjosephs.ac.in/NAAC/Extension%20A ctivities.pdf
Upload any additional information	No File Uploaded

- 3.4.2 Number of awards and recognitions received for extension activities from government / government recognized bodies during the year
- 3.4.2.1 Total number of awards and recognition received for extension activities from Government/ Government recognized bodies year wise during the year

3

File Description	Documents
Any additional information	No File Uploaded
Number of awards for extension activities in last 5 year (Data Template)	<u>View File</u>
e-copy of the award letters	<u>View File</u>

- 3.4.3 Number of extension and outreach programs conducted by the institution through NSS/NCC/Red cross/YRC etc., (including the programmes such as Swachh Bharat, AIDS awareness, Gender issues etc. and/or those organized in collaboration with industry, community and NGOs) during the year
- 3.4.3.1 Number of extension and outreach Programs conducted in collaboration with industry, community and Non- Government Organizations through NSS/ NCC/ Red Cross/ YRC etc., during the year

File Description	Documents
Reports of the event organized	No File Uploaded
Any additional information	No File Uploaded
Number of extension and outreach Programmes conducted with industry, community etc for the during the year (Data Template)	<u>View File</u>

#### 3.4.4 - Number of students participating in extension activities at 3.4.3. above during year

## 3.4.4.1 - Total number of Students participating in extension activities conducted in collaboration with industry, community and Non- Government Organizations such as Swachh Bharat, AIDs awareness, Gender issue etc. year wise during year

3500

File Description	Documents
Report of the event	No File Uploaded
Any additional information	No File Uploaded
Number of students participating in extension activities with Govt. or NGO etc (Data Template)	<u>View File</u>

#### 3.5 - Collaboration

## 3.5.1 - Number of Collaborative activities for research, Faculty exchange, Student exchange/internship during the year

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

File Description	Documents
e-copies of related Document	<u>View File</u>
Any additional information	No File Uploaded
Details of Collaborative activities with institutions/industries for research, Faculty	View File

## 3.5.2 - Number of functional MoUs with institutions, other universities, industries, corporate houses etc. during the year

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

13

File Description	Documents
e-Copies of the MoUs with institution./ industry/corporate houses	<u>View File</u>
Any additional information	No File Uploaded
Details of functional MoUs with institutions of national, international importance, other universities etc during the year	<u>View File</u>

#### INFRASTRUCTURE AND LEARNING RESOURCES

#### 4.1 - Physical Facilities

4.1.1 - The Institution has adequate infrastructure and physical facilities for teaching-learning. viz., classrooms, laboratories, computing equipment etc.

St. Joseph's College of Engineering spans over an area of 14,91,000 square feet. The built-up area is about 1, 26,542 square feet. Class rooms with adequate seating, lighting, ventilation are housed in the sprawling campus. 11 rooms are technology enabled smart class rooms. The campus includes a state of the art air conditioned indoor auditorium equipped with modern audio-video technologies and a seating capacity of 200 persons. 8 corporate halls to house campus meetings, tech talks, guest lectures etc. are present. Faculties as well as administrative staff are provided with cubicle seating. An examination cell with high tech equipment for the conduct of internal as well as university exams is present. Girl's resting rooms, first aid centre are available inside the campus. Separate canteens for boys and girl catering hygienic veg/non-veg/diet food are available. Reverse osmosis treated purified drinking water is provided to students and staff throughout the campus. Huge fleet of buses covering not only all parts of the city but also fringe areas of the city is being operated.

Stationary stores, printing and binding sections and low cost bakery offering snack items are functioning inside the campus. Separate hostels for boys and girls, ATMs, gymnasiums with modern tools and equipment, separate beauty salons are functioning in the campus. Intercom facility connecting entire departments and buildings are provided. Fully functioning chapel, temple and a mosque have been constructed inside the college campus. Guaranteed, un-interrupted power supply with sufficient number of generator sets, inverters, UPSs are provided to benefit class rooms, laboratories and hostel rooms.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://stjosephs.ac.in/facility.html

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

The college emphasize on the overall development of students, by the way of motivating talented and deserving sports men and sports women, offering them free seat, free hostel accommodation, sportswear and gear. The generosity coupled with a noble vision of the management, the institute has bagged numerous prestigious awards and achievements. Sports are given equal weightage as academics. A sports village established on 2001 dedicated for sports activities. The College has the highest intake of sports students in Tamil Nadu.

There are sufficient numbers of atriums, conference halls, auditoriums, amphitheaters for organizing cultural, literary and indoor sports events. Sports facilities for students such as Basketball court, Football Field, Volleyball court, Table Tennis boards, Indoor Badminton court hockey fields, track and field's etc. are provided. The sports students start their practice at 5.30 a.m. in the morning and 4.00 p.m. in the evening. All the sports activities are encouraged by providing necessary facilities when the students participate in Inter University, All India University and other sports tournaments.

Yoga Activities:

Among different fundamental "Sutras" in educating a student like their academic enrichment, physical healthiness, the mental empowerment. In addition to their academic schedule, cultural and physical activities, our college organizes regular "Yoga Activities" on every Saturday. Regular assessment through the response of students who involve themselves in yoga practice indicates improvements in their studies and functions.

#### Regular Cultural activities:

The expressive professionalism is imparted through cultural programs being conducted periodically. The institute has spacious auditoria, with excellent acoustics and massive seating capacity. Programs were planned to impart professional ethics, societal service, environmental protection and patriotism. The students have won various trophies and metals in various competitions. The college also conducts intra-college cultural competitions and cash prizes and merit certificates are distributed on the college day.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://stjosephs.ac.in/sports.html

## 4.1.3 - Number of classrooms and seminar halls with ICT- enabled facilities such as smart class, LMS, etc.

#### 147

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://stjosephs.ac.in/facility.html
Upload Number of classrooms and seminar halls with ICT enabled facilities (Data Template)	View File

#### 4.1.4 - Expenditure, excluding salary for infrastructure augmentation during the year (INR

#### in Lakhs)

### 4.1.4.1 - Expenditure for infrastructure augmentation, excluding salary during the year (INR in lakhs)

47792249.00

File Description	Documents
Upload any additional information	<u>View File</u>
Upload audited utilization statements	<u>View File</u>
Upload Details of budget allocation, excluding salary during the year (Data Template	<u>View File</u>

#### 4.2 - Library as a Learning Resource

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

#### AutoLib - Library Management Software

Autolib software is a web enabled software developed using HTML. JavaScript and Java Technologies to provide more flexibility, security and stability. The software needs to be installed only in the server which saves a lot of time from maintaining the client systems.

The LMS is designed to work as a cross-platform software on Intranet and Internet environments which makes it user-friendly and intuitive. This system uses MySQL - an open source RDBMS as the database. This software consists of the modules viz. Database Management Systems, Search (OPAC), Counter Management Systems, Acquisition Control Systems, Report Management, Systems
Administration-Resources Linking and Web Module.

The login passwords are provided to all the users for authentication with the ability to change their password at any

time. The system supports a multitude of stakeholders under the following categories,

- Users Access to search and ability to view their transactions
- Counter Access to functions related to counter transactions
- Admin Access to all modules

OPAC (online public access catalogue) facilitates users to know the availability of books, searching of documents and borrowing details of documents within campus from the place where they are.

Dashboard facility is a single window access to use all the features of the software based on his privileges/roles by a simple click. Users need not to go to each and every menu to use this facility .Access facility is given in the dashboard to use all the menus.

#### Facilities available in Dashboard for Admin I

Admin 1 can get the following details by clicking the respective icons/buttons

#### Collection:

Total Collection Total Members

Transaction details (to-day)

- 1. List of books issued books today
- 2. List of books returned today
- 3. List of books renewed
- 4. List of books due for returned today
- 4. Overdue amount today
- 5. Overdue paid and overdue balance

#### Facilities available in Dashboard for Users

Users need not go to each and every menu to use this facility.

Search Facility - Allows using Search, Advanced Search, Quick Search, Journal Search, etc

Change Password - Allows changing the password.

New Arrivals - by clicking this, user will get a list of newly added resources in the library

Transaction details - By clicking, the user will know the status of the total number of books issued, returned, reserved - by a particular user.

Overdue charges - The overdue charges paid and pending for a user.

#### Modules Description:

- 1. Database Management System: This modules allows to create, update/edit and maintain the following databases such as
  - Books, Thesis, Non Books, Project Reports
  - Journals, Journal Issues Journal Articles and Back volumes
  - News Paper Clippings
  - Authors, Publishers, Suppliers Subjects
  - Members, Departments, Courses
- 2. Search: This module is designed to search all the above databases using all the important fields and print search results in any desired format
  - Simple search
  - Advanced search
  - Restricted search
- 3. Circulation Management Systems: This Module is designed for

all types of counter transactions for Books, Journal Issues, Book Bank Books, Reports, Thesis and Non Books such as

- Issue/Return/renewal
- Reservation/Reservation Cancel
- Reminders/Overdue Reports/No due Certificates
- Printing barcode labels
- Transaction reports
- 4. Acquisition Control Systems: This module is designed to automate various activities involved in Book ordering and processing such as
  - Checking for duplicates
  - · Receipt of Documents and Invoice processing
  - Order follow-up, payment to Suppliers
  - Fund/Budget control
  - Transfer the Processed Indents details to book Database
  - Status report, Vendor Information, etc.
- 5. Serial Control System (Journals): This Module is designed for automate various activities involved in subscription of journals such as
  - Creation and maintenance of Journal Master
  - Subscription/Renewal of Journals
  - Invoice Processing, payment and budget control
  - Generation of Journal issues with details
  - Receipt of issues and claiming missing issues
  - Searching/Browsing
- 6. Systems Administration: This modules allows to
  - Create new user login ID, Password and grant rights to access various modules
  - Create group Master-to set due date, allowed cards for different documents for different categories
  - Conduct online stock verification
  - Maintain Budget Master
- 7. Report Management: This module is designed to generate and

#### print a large number of reports such

as

- List of books by author, title, unique titles, supplier, call number, subject, department, document type, availability, etc.
- Amount spent for procuring books under various
- List of Journals Indian/Foreign
- List of Members
- Accession register, catalogues
- List of Suppliers/Publishers
- 8. Web Module: This module allows to search various databases using browsers like Internet Explorer or Lan/Intranet environment using Web services and it has the following WEB OPAC modules
  - Simple search/Advanced search
  - Statistics
  - Search reports, circulation reports

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for Additional Information	https://stjosephs.ac.in/facility.html

#### 4.2.2 - The institution has subscription for the following e-resources e-journals e-ShodhSindhu Shodhganga Membership ebooks Databases Remote access toeresources

A. Any 4 or more of the above

File Description	Documents
Upload any additional information	<u>View File</u>
Details of subscriptions like e- journals,e-ShodhSindhu, Shodhganga Membership etc (Data Template)	<u>View File</u>

## 4.2.3 - Expenditure for purchase of books/e-books and subscription to journals/e- journals during the year (INR in Lakhs)

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

#### 1643673.00

File Description	Documents
Any additional information	<u>View File</u>
Audited statements of accounts	<u>View File</u>
Details of annual expenditure for purchase of books/e-books and journals/e- journals during the year (Data Template)	<u>View File</u>

## 4.2.4 - Number per day usage of library by teachers and students (foot falls and login data for online access) (Data for the latest completed academic year)

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

#### 120

File Description	Documents
Any additional information	<u>View File</u>
Details of library usage by teachers and students	<u>View File</u>

#### 4.3 - IT Infrastructure

#### 4.3.1 - Institution frequently updates its IT facilities including Wi-Fi

The college has adequate facilities of the information technologies including Wi - Fi and the internet connections well spread through the campus and it is updated frequently. The institution is equipped with 1614 internet connected computers, besides having 11 interactive boards with visualizers and LCD projectors installed in all departments. All the systems in the college campus are provided with LAN facility. The college has a well-equipped smart class rooms with all modern facilities concerning ICT. The conference halls consist of computers with internet and LCD Projectors.

The entire college campus is connected through fiber optic network which ensures reliable connections all the time. Internet Facility is available at all hostel rooms, library, placement blocks and all the laboratories within the campus. Campus network enables remote learning, conferences, collaborative research, industry relations, alumni and remote recruitment, competitive examinations conducted by the Government. The campus has integrated software for various administrative and academic activities. All the notices are electronically circulated through e-mails. The college uses various open source and license software which are upgraded periodically with the latest version. A team of in-house staff is designed to take care of the IT & related needs of the campus such as Software, Hardware and Networking, Website designing and hosting, Email, SMS solutions, etc.

All the computers are connected to uninterrupted power supply for safe operations and security is also ensured due to the usage of hardware firewall. The various other computing facilities like printers, software, database, dedicated lease-line of 215 Mbps bandwidth with Wi-Fi networking caters to all the labs and departments for the benefit of faculty and students.

The institution, including hostels is well connected through OFC technology which connects 1614 Nodes. NMEICT BSNL 20 lines of 10 Mbps (VOIPP) are utilized for academic purposes. This internet facility is used well for research, curricular, co-curricular and extra-curricular activities by students and staff members.

Infrastructure facilities for e-content development including lecture capturing center, ICT enabled seminar halls help the faculty to prepare ICT enabled learning materials. Fully air conditioned conference halls, and tutorial rooms equipped with all modern facilities & Audio Visual halls are also in place for special lectures by renowned resource persons with informative models for power point presentations and animations.

Construction of new laboratories, renovation and up-gradation of existing laboratories, expansion and modernization of facilities are an integral part of our growth plan. Laboratories with desktops and workstations provide centralized computing facilities to faculty members and students for promoting the teaching and learning environment.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://stjosephs.ac.in/facility.html

#### 4.3.2 - Number of Computers

#### 1614

File Description	Documents
Upload any additional information	<u>View File</u>
List of Computers	<u>View File</u>

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

A. ? 50MBPS

File Description	Documents
Upload any additional Information	<u>View File</u>
Details of available bandwidth of internet connection in the Institution	<u>View File</u>

#### 4.4 - Maintenance of Campus Infrastructure

4.4.1 - Expenditure incurred on maintenance of infrastructure (physical and academic support facilities) excluding salary component during the year (INR in Lakhs)

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

File Description	Documents
Upload any additional information	<u>View File</u>
Audited statements of accounts	<u>View File</u>
Details about assigned budget and expenditure on physical facilities and academic support facilities (Data Templates)	<u>View File</u>

4.4.2 - There are established systems and procedures for maintaining and utilizing physical, academic and support facilities - laboratory, library, sports complex, computers, classrooms etc.

The campus holds well established standard systems and procedures for maintaining the physical, academic and support facilities that are governed by the supervision of faculty in charges in college level. They ensure the various aspects of utilization and maintenance of the physical, academic and support facilities such as maintenance of buildings, laboratories, classrooms, library, sports complex, computers, etc. Adequate in - house staff is employed to meticulously maintain hygiene, cleanliness and infrastructure on the campus so as to provide a congenial learning environment..

#### Class Room

- Most of the lectures take place in classrooms with projector, microphone and speakers. This is to ensure usage of new audio-visual pedagogical techniques during the teaching process along with this we have audio visual halls where lecture are given.
- The college has various committees for maintenance and upkeep of infrastructure. At the departmental level, HODs submit their requirements to the Principal regarding classroom furniture and other.

#### Laboratory

- Record of maintenance account is maintained by lab technicians, Lab In charge and supervised by HODs of the concerned departments.
- Department wise annual stock verification is done by concerned Head of the Department.
- Regular maintenance of Computer Laboratory equipment's are done by Laboratory Assistant along with Laboratory attendant and they are headed by the faculty in charge.
   Periodic reporting on requirements of repairs and maintenance are submitted by the Lab In charges to the HODs.
- The requirements are collectively processed in every semester break so as to keep things ready for the new semester.
- The non-teaching staff is also trained for safety.

#### Library

- A regular update on new additions is provided by the library.
- A library committee works regularly to oversee the functioning of the library and various other committees' coordinate with each other to enable the students to get maximum exposure and participation and also to avail all the facilities provided by the college
- The maintenance of the reading room and stock verification of library books is done regularly by library staff.

Sports and Games is an internal part of the college and coaches are available for the students regarding the maintenance of sports equipment the college sports in charge is deputed.

#### Additionally

- The college has various committees for maintenance and upkeep of infrastructure. At the departmental level, HODs submit their requirements to the Principal regarding classroom furniture and other.
- Suitable budget is allocated every year for the maintenance of various facilities.
- An eco-friendly environment is of prime importance in the college.
- Regular cleaning of water tanks, proper garbage disposal, pest control, landscaping and maintenance of lawns is done. wash rooms and rest rooms are well maintained. The Green Cover of the campus is well maintained
- Cleanliness of environment in men's and women's hostel is maintained
- Regular maintenance of the water cooler and water purifier is done. The campus maintenance is monitored through surveillance Cameras.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://stjosephs.ac.in/NAAC/4.4.2%20Maint enance%20of%20Laboratory.pdf

#### STUDENT SUPPORT AND PROGRESSION

#### **5.1 - Student Support**

## 5.1.1 - Number of students benefited by scholarships and free ships provided by the Government during the year

## 5.1.1.1 - Number of students benefited by scholarships and free ships provided by the Government during the year

1415

File Description	Documents
Upload self attested letter with the list of students sanctioned scholarship	<u>View File</u>
Upload any additional information	<u>View File</u>
Number of students benefited by scholarships and free ships provided by the Government during the year (Data Template)	<u>View File</u>

## 5.1.2 - Number of students benefitted by scholarships, free ships etc. provided by the institution / non- government agencies during the year

## 5.1.2.1 - Total number of students benefited by scholarships, free ships, etc provided by the institution / non- government agencies during the year

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

# 5.1.3 - Capacity building and skills enhancement initiatives taken by the institution include the following: Soft skills Language and communication skills Life skills (Yoga, physical fitness, health and hygiene) ICT/computing skills

A. All of the above

File Description	Documents
Link to Institutional website	https://stjosephs.ac.in/NAAC/5.1.3.pdf
Any additional information	<u>View File</u>
Details of capability building and skills enhancement initiatives (Data Template)	<u>View File</u>

## 5.1.4 - Number of students benefitted by guidance for competitive examinations and career counseling offered by the institution during the year

2278

## 5.1.4.1 - Number of students benefitted by guidance for competitive examinations and career counseling offered by the institution during the year

2278

File Description	Documents
Any additional information	<u>View File</u>
Number of students benefited by guidance for competitive examinations and career counseling during the year (Data Template)	<u>View File</u>

## **5.1.5 - The Institution has a transparent** mechanism for timely redressal of student

A. All of the above

grievances including sexual harassment and ragging cases Implementation of guidelines of statutory/regulatory bodies Organization wide awareness and undertakings on policies with zero tolerance Mechanisms for submission of online/offline students' grievances Timely redressal of the grievances through appropriate committees

File Description	Documents
Minutes of the meetings of student redressal committee, prevention of sexual harassment committee and Anti Ragging committee	<u>View File</u>
Upload any additional information	No File Uploaded
Details of student grievances including sexual harassment and ragging cases	<u>View File</u>

#### **5.2 - Student Progression**

#### 5.2.1 - Number of placement of outgoing students during the year

#### 5.2.1.1 - Number of outgoing students placed during the year

1082

File Description	Documents
Self-attested list of students placed	<u>View File</u>
Upload any additional information	<u>View File</u>
Details of student placement during the year (Data Template)	<u>View File</u>

#### 5.2.2 - Number of students progressing to higher education during the year

#### 5.2.2.1 - Number of outgoing student progression to higher education

File Description	Documents
Upload supporting data for student/alumni	<u>View File</u>
Any additional information	No File Uploaded
Details of student progression to higher education	<u>View File</u>

- 5.2.3 Number of students qualifying in state/national/international level examinations during the year (eg: JAM/CLAT/GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/State government examinations)
- 5.2.3.1 Number of students qualifying in state/ national/ international level examinations (eg: JAM/CLAT/NET/ SLET/ GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/ State government examinations) during the year

107

File Description	Documents
Upload supporting data for the same	<u>View File</u>
Any additional information	No File Uploaded
Number of students qualifying in state/ national/ international level examinations during the year (Data Template)	<u>View File</u>

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

- 5.3.1 Number of awards/medals for outstanding performance in sports/cultural activities at university/state/national / international level (award for a team event should be counted as one) during the year
- 5.3.1.1 Number of awards/medals for outstanding performance in sports/cultural activities at university/state/ national / international level (award for a team event should be counted as one) during the year.

File Description	Documents
e-copies of award letters and certificates	<u>View File</u>
Any additional information	<u>View File</u>
Number of awards/medals for outstanding performance in sports/cultural activities at univ ersity/state/national/internationa l level (During the year) (Data Template)	<u>View File</u>

5.3.2 - Institution facilitates students' representation and engagement in various administrative, cocurricular and extracurricular activities (student council/ students representation on various bodies as per established processes and norms)

St. Joseph's College of Engineering encourages better participant relationships and paves an open door for students to expose their inbuilt skills and hidden talents. The institution promotes value-based education for instructing social accountability and good citizenry amongst its student community. The institution has the sufficient infrastructure and upholds active participation of the students in social, cultural and leisure activities. Producing all-rounders by encouraging student participation in various technical and non-technical activities has been one of the institution's aim. The institution facilitates programs for developing various skills and competencies of the students thereby achieve holistic development.

The Institution has implemented various schemes such as the National Service Scheme (NSS), Youth Red Cross (YRC), Non-Governmental Organization (NGO), Civil Services Academy, Defense Academy and Entrepreneurship Development Cell (EDC) to develop the skill of students in different arenas. These schemes are functioning under the guidance of various faculty members who act as coordinators, thus motivating student participation in social activities. Students are actively involved in the above mentioned cells and thus improve their social values and turn into responsible citizens.

The institution has various student clubs and the heads of these clubs being a part of the academic council oversee all the cultural activities of St. Joseph's. The technical and non-technical clubs include the Tamil Mandram, English Club, Maths Club, CTS Club, Developer Students Club, Coding Club and Eco-Soc Club. The Institution provides wider avenues for the students in

terms of development of technical skills, updating of knowledge, personality development and service to the society through technical societies such as the Computer Society of India (CSI) and Indian Society for Technical Education (ISTE). Students are organizing events as well as participating in events through student forums such as the IETE Students Forum, IEEE Students Forum, IChem Students Forum, SAE Students Forum, IWS Forum and the ISHPE Forum.

In addition to providing scope for the growth of the technical skill of the students, exposure to inter-collegiate and intra-department symposiums promotes self-confidence, leadership and team-spirit amongst the student community. The Institution conducts department wise students meetings at the start of every semester, where a six-student team participates as representatives of their department and give feedback on their academic need. Thus the institution has an active student council and students are represented on all the academic and administrative committees of the institution.

File Description	Documents
Paste link for additional information	https://stjosephs.ac.in/NAAC/5.3.2.pdf
Upload any additional information	<u>View File</u>

## 5.3.3 - Number of sports and cultural events/competitions in which students of the Institution participated during the year (organized by the institution/other institutions)

## **5.3.3.1 - Number of sports and cultural events/competitions in which students of the Institution participated during the year**

File Description	Documents
Report of the event	<u>View File</u>
Upload any additional information	<u>View File</u>
Number of sports and cultural events/competitions in which students of the Institution participated during the year (organized by the institution/other institutions (Data Template)	<u>View File</u>

#### 5.4 - Alumni Engagement

5.4.1 - There is a registered Alumni Association that contributes significantly to the development of the institution through financial and/or other support services

The alumni association in St Joseph's college of Engineering was inaugurated for its functioning from 1998 onwards. Officially Alumni Association has been registered as "St.Joseph's College of Engineering - Alumni Association" on 5th August 2019. The institution is extremely proud of every member of its alumni. Most of them are successful in their careers and in the field of entrepreneurship. The alumni meet is conducted once or twice in a year, where the passed out students of under graduate and post graduate programs share their views and give suggestions for the betterment curriculum, campus and to their junior students.

A dedicated link in our college website is available exclusively for our alumni students, where they can enroll their profile get membership in the alumni association through online. We are proud to say that a significant number of our passed out students are currently continuing either higher studies or employment at U.S.A, U.K., Germany, Australia, Canada, and Singapore etc. These alumni members are regularly informed about the actives and developments of the college through official Facebook alumni group.

Role model and inspiration

Any distinguished alumni are an effective role model accepted by students. 'Alumni special talks' are been often arranged by the departments through online and their experiences that are shared regarding time management, self-discipline and character or career management often found be more easily accepted as guidance and inspiration by students. Through this way our alumni are successfully contributing in strengthening confidence and inculcate the right social culture and navigate their junior students.

#### Career Guidance

Our college has a unique platform of 'Alumni mentors' where the distinguished alumni, mentor the current students through the networking forums. They share their experiences, knowledge and advice the students and by means of these alumni meets, a strong bond is created between the passed-out students and current batch and helps them to get best career guidance of their choice.

Apart from this, the alumni frequently visit the institution and deliver guest lectures on career guidance in their areas of expertise and motivate the young minds.

Successful alumni entrepreneurs are often invited to share their success stories through online during this new normal situation. The alumni also help the final year students of the various streams of engineering and business administration to get their placements and summer internship in their companies. The alumni association meetings also pave the way for the successful placements of the students.

File Description	Documents
Paste link for additional information	https://stjosephs.ac.in/Elite%20Alumni.htm
Upload any additional information	<u>View File</u>

## **5.4.2 - Alumni contribution during the year** (INR in Lakhs)

D. 1 Lakhs - 3Lakhs

File Description	Documents
Upload any additional information	<u>View File</u>

#### GOVERNANCE, LEADERSHIP AND MANAGEMENT

#### 6.1 - Institutional Vision and Leadership

6.1.1 - The governance of the institution is reflective of and in tune with the vision and mission of the institution

#### VISION

To become a world class educational centre of the nation for Engineering, Technology, Computer Applications and Management with moral and professional standards to serve the community at large.

Articulation of the vision

We believe in providing a quality technical education coupled with strong fundamentals and moral standards would enable students to excel in their respective field of study. We also empower students to perform better at their work place and

#### become a better citizen

#### **MISSION**

To achieve academic excellence in Engineering, Technology, Computer applications and Management Education.

To inculcate high moral and professional standards among our students.

To develop overall personality of the students.

To promote industry institute interaction through more number of collaborative programs with industries / research and development centers.

To venture for sustained placement for our students through campus interviews

Articulation of the mission

The mission of the institute would be the reality if we could create the professionals with technical competence and managerial skills with no compromise on values and ethics. In the journey of accomplishing the vision, the institute strives to bring a holistic development of the students to fulfill the expectancies of the industry and society.

The nature of governance, perspective plans and participation of the teachers in the decision making bodies

The Chairman leads the administration of the institution and guides Principal, faculty and students work towards the vision of the institute. Based on the Vision and Mission of the institute and driven by the needs of the corporate world, society and stakeholders, the strategic plans of the institute are framed. All vital decisions regarding the commencement of new courses, expansion of infrastructure, formulation and promulgating of strategy are approved by the Chairman. The implementation process is further discussed with the Principal and Heads of the departments for execution.

The perspective plans are prepared by the Principal. The academic calendar (semester wise) scheduling the internal assessment tests, industrial visits, conferences, workshops, seminars, FDPs, club activities, sports day, graduation day, NGO visits, celebrations etc is prepared by the Principal after having discussions with the HODs and various committee members. The Principal ensures quality standards in teaching learning Process, evaluation system and other related activities. The Principal initiates various quality enhancement programmes in the institution and is assisted by HODs, Administrative Head, Incharges and Coordinators of various cells/committees in decision making process of the Institute.

HOD's prepare the operational plan for their respective departments with the concern of the Principal. Faculty and staff are assigned with the roles and responsibility to work in a harmonious environment with complete transparency. HOD's conduct periodic meeting in the department The collective suggestions given by the faculty, students, corporate and other stake holders are discussed with the Principal. The Principal discusses the suggestions and gets the approval of the chairman. The approved decisions are circulated among the stakeholders for execution. The management ensures a smooth flow of information Top down and bottom up paving way for excellent team work among the stakeholders.

File Description	Documents
Paste link for additional information	https://stjosephs.ac.in/about%20us/index.h tml
Upload any additional information	<u>View File</u>

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

The Institution has a culture of decentralized governance system with well-defined inter-relationships. Institute delegates adequate and systematized authority to the departments to work towards decentralized governance system. Various committees like the Advisory Committee, Placement Committee, EDC and so involving faculty are constituted to manage different institutional activities. The management has extended enough

financial powers to Principal and Department Heads to carry out these activities.

A case in point: Annual budget: Proposal, Approval and Allocation.

Principal is responsible for the preparation of the overall budget. The Budget planning for the year starts in the month of January. The Department heads and the administrative in- charges are instructed to plan the budget for the forthcoming year. They are invited to submit their carefully proposed budget for every academic year by the last week of February.

The HOD instructs the Department in-charges to prepare the budget proposal for various activities like workshops, guest lectures, seminars, conferences, training, value added courses, professional body activities and industrial visits etc. In addition to this the lab-in charges are also asked to come up with a proposal of their requirements for purchase of new equipment, repairs and maintenances, service, training and up gradation. The final budget proposal is prepared after scrutinizing at department level by the concerned heads.

The administrative in - charges for placement, electrical, water, transport, mess, exam office, and civil works will also submit the proposal to the Principal. The budget proposal for the library is prepared by the librarian after consulting various departments.

The budget proposal at the institutional and departmental levels is submitted to the Principal on or before 1st of March. The Principal then consolidates all the budget proposals received from the subordinates and organize a meeting to eliminate redundancy. The modified proposed budget is forwarded to the Chairman for approval. The approved budget is then communicated to all heads and in-charges through proper channels. A monthly requirement form is submitted to the Principal every month along with the previous month's expenditure. On the approval of of the Principal and the Director, Accounts department releases the funds for the same. Through effective decentralization, the institution practices successful delegation and enhances the productivity of the college. This style of participative management ensures complete and constructive delivery of financial activities

File Description	Documents
Paste link for additional information	https://stjosephs.ac.in/NAAC/AQAR%202020-2 021/6.1.2.pdf
Upload any additional information	<u>View File</u>

#### 6.2 - Strategy Development and Deployment

#### 6.2.1 - The institutional Strategic/perspective plan is effectively deployed

The leadership provides clear vision and mission to the institution. The functions of the institution and its academic and administrative units are governed by the principles of participation and transparency.

The college has the following perspective plans:

- 1. Enhancing the quality of Teaching Learning
- 2. Promotion of Research among faculties and students
- 3. Talent acquisition and retention
  - 4. Quality Assurance Measures
- 5. Improving Entrepreneurship Development and Industry-Institution- Interaction
- 6. Placement and Training activities

Example of an activity successfully implemented based on the strategic planning:

Title of Practice: Promotion of Research among the faculty and students

#### Objectives:

- To upgrade the qualification and knowledge of the faculty and students
- To create a research culture in the institute
- To establish recognized center of higher learning &

research leading to Ph. D. and facilitate further research.

The need for upgrading the qualification of the teachers was perceived well ahead by the Institution. The initiative taken by the management and encouragement of the Principal has motivated many faculty members to pursue their PhD degrees. The faculties are given OD for120 days to complete their research work. In addition to this they are also givenon duty of two days per week to complete their course work during the first year of their research number of PhD's in the college is130.40 Faculty members are also recognized supervisors in various universities and 5 departments are recognized as Research Centers by Anna University.

To bring about research culture in the institute, the management encourages the faculties and students to publish articles in refereed journals of high repute. Faculty are encouraged to attend conferences both at national and inBesides faculties, the students are also motivated to attend the conferences, workshop and take-up internship, and collaborative projects for upgradation of knowledge. The college conducts national level seminars/ conferences to provide a platform for the students and faculties to present their research findings.

The incubation center and the center of excellence approved by MSME is again a stride taken by the college in the direction of promoting research work.

File Description	Documents
Strategic Plan and deployment documents on the website	<u>View File</u>
Paste link for additional information	https://stjosephs.ac.in/NAAC/AQAR%202020-2 021/6.2.1%20(a).pdf, https://stjosephs.ac. in/NAAC/AQAR%202020-2021/6.2.1%20(b).pdf
Upload any additional information	<u>View File</u>

6.2.2 - The functioning of the institutional bodies is effective and efficient as visible from policies, administrative setup, appointment and service rules, procedures, etc.

Board of Governance

#### Governing Council:

The governing councilconsists of Chairman, Managing Director, Director, The region Officer SRC, the Commissioner of Technical Education(DOTE) Industry representative, Principal and Senior Faculty Members. The governing council is responsible to monitor the overall performance of the institution. The committee meets once in a year to review the performance and provides suggestions in the areas of improvements.

#### Academic Council:

The council is responsible to monitor the academic schedule, maintaining the standards of teaching, research and the assessment tools and procedures. It reviews and appraises all the functions of the sub committees on a periodical basis.

#### Advisory Committee

This committee plans and monitors all academics and other activities at institutional level. It reviews the quality of course delivery process and attainment of outcomes. It also reviews the process for providing skill and knowledge beyond the syllabus in attaining PO, PSO through CO. The committee guides Professional society activities, and Industry institute interaction activities, functions of estate office, and Placement and Training activities. The committee meets once in two months.

Roles of Administrators & Decision Makers:

#### Chairman:

- Responsible for formulating and promulgating the Policy and objectives of the Institution,.
- Overall control of the financial function of the Institution.
- Overall responsible for recruitment/inducting potential personnel against the nature of job, including Principal.
- Overall responsibility for providing resources vise Human, Infrastructure, other facilities and suitable environment for the successful functioning of the institution.

#### Managing Director:

- Responsible for implementing the decisions with regard to St. Joseph's college of Engineering taken by the Trust from time to time.
- Responsible for the administration of Transport and Mess facilities in consultation with Chairman & Managing Director
- Responsible for day to day bill passing

#### Director:

- Responsible for implementing the decisions with regard to St. Joseph's college of Engineering taken by the Trust from time to time.
- Responsible for day to day bill passing
- Responsible for the administration of Transport and Mess facilities in consultation with Chairman & Managing Director

#### Principal:

Overall responsibility of planning and implementing all academic activities.

- Overall responsible for planning of Academic calendar.
- Budget finalization for academic activities.
- Finalisation of resource acquiring.
- Communicating with AICTE, NBA, DOTE, Anna University and other Statutory bodies and implementing / executing the instructions / guidelines provided by them.
- Responsible for evaluating and monitoring the performance of various departments of the Institution and reporting to the Chairman, Managing Director & Director.
- Responsible for organizing and conducting staff meetings.
- To ensure that students develop their interpersonal skills apart from regular curriculum.
- To motivate and encourage students to excel in various academic, co-curricular & extracurricular activities.
- To ensure the discipline of the college is well maintained.

#### Dean

 Responsible for the process of faculty members applying for higher studies - Ph.D., monitoring of availing OD during the period of Ph.D.courseand conductingthe periodic

- reviewsto monitor their progress.
- Responsible for the process of faculty for applying to attend training, FDP, workshop and conference in India and abroad
- Responsible for motivating the faculty members todo research work and publish their work in high reputed journals

#### Head of Departments:

- Responsible for planning and conducting teaching learning process successfully & ensure discipline among students and faculty members of their respective departments.
- · Responsible for organizing and conducting staff meetings.
- Ensure that they get all the academic facilities for human & physical resources & ensure that their departments and laboratories are well maintained.
- Ensure that Industrial visits, Guest lecturers, Seminars, Association functions, etc are arranged for the benefit of students.
- Responsible for reporting periodically about the status of various activities being performed in the department to the Principal.
- Analyze the feedbacks from both students and parents and to take appropriate corrective/preventive actions for improvement if necessary in consultation with Principal.
- Responsible for work load allocation in the beginning of each semester with the approval from Principal.
- Budget Request submission to Principal after discussing with various in charges.

#### Manager

- Overall In charge of administration of the college.
- Responsible to look into all matters related to AICTE,
   DOTE, Anna University and Government of Tamil Nadu and for maintaining needed records.
- Responsible for organizing the Public Relation functions.

#### Grievance Redressal Mechanism

A committee consisting of about four members (two women faculty) is constituted. Grievances form the students, faculty or staff if received is discussed and the necessary action is initiated by Grievance Redressal Committee

#### Service , Recruitment and Promotion Rules :

The service the promotion and recruitment rules are framed in accordance to the norms of AICTE, Anna University and it is made available in the webpage of the institution.

File Description	Documents
Paste link for additional information	https://stjosephs.ac.in/Service%20Rules.pd <u>f</u>
Link to Organogram of the institution webpage	https://stjosephs.ac.in/NAAC/6.2.2%20(b)%2 0Organogram%20of%20the%20institution.pdf
Upload any additional information	<u>View File</u>

# 6.2.3 - Implementation of e-governance in areas of operation Administration Finance and Accounts Student Admission and Support Examination

A. All of the above

File Description	Documents
ERP (Enterprise Resource Planning)Document	<u>View File</u>
Screen shots of user inter faces	<u>View File</u>
Any additional information	No File Uploaded
Details of implementation of e- governance in areas of operation, Administration etc(Data Template)	<u>View File</u>

#### **6.3 - Faculty Empowerment Strategies**

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

#### Teaching Staff:

- 1. Medical allowances to meet emergency medical expenses of staff and their dependents with medical leave.
- 2. Free transport and mess facilities to all
- 3. Marriage gift for staff and their wards and providing leave.
- 4. House warming gift.

- 5. Maternity leave with full salary.
- 6. Registration fees for attending conferences, workshops and FDPs
- 7. Providing professional body membership fees
- 8. Providing financial support to attend and present research papers in national level and international level conferences and for refereed journals.
- 9. Employee Provident Fund, Pension Schemes.
- 10. Blazers for all teaching staff for comfortable teaching.
- 11. On campus free medical facilities and physiotherapy
- 12. Cafeterias

#### Non Teaching Staff:

- Medical allowances to meet emergency medical expenses of non - teaching staff and their dependents with medical leave
- 2. Vacation for the securities with travelling allowance
- 3. Three sets of uniform per year
- 4. Marriage gift for staff and their wards with leave.
- 5. House warming gift.
- 6. Maternity leave with full salary.
- 7. On campus free medical facilities and physiotherapy
- 8. Employee Provident Fund and Pension Schemes
- 9. Free accommodation in hostel for out station employees
- 10. Free transport and mess facilities
- 11. Cafeterias

File Description	Documents
Paste link for additional information	https://stjosephs.ac.in/NAAC/AQAR%202020-2 021/6.3.1.pdf
Upload any additional information	<u>View File</u>

#### 6.3.2 - Number of teachers provided with financial support to attend conferences/ workshops and towards membership fee of professional bodies during the year

## 6.3.2.1 - Number of teachers provided with financial support to attend conferences/workshops and towards membership fee of professional bodies during the year

1

File Description	Documents
Upload any additional information	<u>View File</u>
Details of teachers provided with financial support to attend conference, workshops etc during the year (Data Template)	<u>View File</u>

- 6.3.3 Number of professional development /administrative training programs organized by the institution for teaching and non-teaching staff during the year
- 6.3.3.1 Total number of professional development /administrative training Programmes organized by the institution for teaching and non teaching staff during the year

121

File Description	Documents
Reports of the Human Resource Development Centres (UGCASC or other relevant centres).	<u>View File</u>
Reports of Academic Staff College or similar centers	<u>View File</u>
Upload any additional information	<u>View File</u>
Details of professional development / administrative training Programmes organized by the University for teaching and non teaching staff (Data Template)	<u>View File</u>

- 6.3.4 Number of teachers undergoing online/face-to-face Faculty development Programmes (FDP) during the year (Professional Development Programmes, Orientation / Induction Programmes, Refresher Course, Short Term Course etc.)
- 6.3.4.1 Total number of teachers attending professional development Programmes viz., Orientation / Induction Programme, Refresher Course, Short Term Course during the year

240

File Description	Documents
IQAC report summary	<u>View File</u>
Reports of the Human Resource Development Centres (UGCASC or other relevant centers)	<u>View File</u>
Upload any additional information	<u>View File</u>
Details of teachers attending professional development programmes during the year (Data Template)	<u>View File</u>

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

Institute has systematic performance appraisal system to assess the performance of teaching and non-teaching staff. The teaching staff appraisal comprises three categories such as HOD appraisal, peer appraisal and self appraisal.

#### **HOD Appraisal:**

The following factors have been selected for HOD appraisal to reflect the basic core competencies to assist the performance of all staff members.

- 1. Teaching skill and knowledge
- 2. Research and Consistency activities
- 3. Faculty has control and maintains discipline
- 4. Extra efforts for weak students

#### Peer Appraisal:

All the faculties are rated by their colleagues and the highlights of the peer appraisal to assess the professionalism are reproduced below:

- 1. Submits departmental reports on time
- 2. Adheres to departmental and college policies
- 3. Participates in departmental and campus wide activities
- 1. Co curricular activities

#### Self Appraisal

Each and every faculty member completes the selfappraisal procedure every year in the prescribed format.

- 1. Results
- 2. Training attended
- 3. Paper publications in indexed journal
- 4. Funded projects/ /Consultancy / Award and patents
- 5. Quality of the projects

#### Non - Teaching Staff

The accountability and involvement of non - teaching staff are also assessed by the components

- 1. Task Execution
- 2. Skill upgradation
- 3. Higher Studies
- 4. Work Discipline & Maintenance

File Description	Documents
Paste link for additional information	https://stjosephs.ac.in/NAAC/AQAR%202020-2 021/6.3.5.pdf
Upload any additional information	<u>View File</u>

#### 6.4 - Financial Management and Resource Mobilization

6.4.1 - Institution conducts internal and external financial audits regularly Enumerate the various internal and external financial audits carried out during the year with the mechanism for settling audit objections within a maximum of 200 words

#### Internal audit:

The institution has a well-defined mechanism to review the handling of funds. The scrutinizing and sanctioning of budget is well defined and transparent. All the department and administrative in-charges submit the annual budget to the Principal for scrutinizing, then forwarded to the Chairman for approval. The approved budget is communicated to the in-charges in order to prepare their monthly budget. The monthly budget is reviewed along with the expenditure incurred during the previous month in the budget meeting presided by the Chairman. The budget meeting is held during last Monday of every month. The annual

income and expenditure statement is submitted by all department and administrative in-charges to the Principal for reviewing and it is forwarded to the Chairman. Each department in-charges, administrative in-charges, accounts department, and the Principal office maintain appropriate records of their budget, income and expenditure statement. The accounts department keeps the record of all the expenditures after the verification of vouchers and bills.

#### External auditing

Statutory auditing norms are fulfilled by the Institution. The annual financial statement is duly audited and certified by a Chartered Accountant at the end of every financial year. The auditor's report for the financial year is thereafter prepared by the Chartered Accountant. These procedure shows the transparency being maintained in financial matters. Reflecting the Institutions true and fair views in the financial position, operating expenses, and cash inflows.

File Description	Documents
Paste link for additional information	https://stjosephs.ac.in/NAAC/AQAR%202020-2 021/6.4.1.pdf
Upload any additional information	<u>View File</u>

# 6.4.2 - Funds / Grants received from non-government bodies, individuals, philanthropers during the year (not covered in Criterion III)

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

0

File Description	Documents
Annual statements of accounts	No File Uploaded
Any additional information	No File Uploaded
Details of Funds / Grants received from of the non- government bodies, individuals, Philanthropers during the year (Data Template)	<u>View File</u>

#### 6.4.3 - Institutional strategies for mobilization of funds and the optimal utilization of resources

#### Mobilization of funds

The institution mobilizes the funds through the student fees who are admitted as per regulations laid by Tamil Nadu Government Higher Education. Another source of fund is through the internal revenue that is the interest obtained from deposits of fund. The other sources include: Workshop, Training & Consultancy, Participation fee in various conferences, seminars organized by the Institution, Establishment of Industry sponsored lab, and Research Project grants.

The financial resources obtain from other sources are utilized for their respective activities.

#### Utilization of funds

The fund is optimally utilized for the Students, Staff, laboratory, infrastructure, Library, etc. The fund is utilized for students activities such as organizing symposium, the winners of technical symposium attended in other colleges are provided with TA/DA and registration fee, placement training and development programs, value added courses, trust awards, cash award for rank holders, achiever's day, guest lecturers and industrial visits.

The budgeted fund is utilized for purchase and maintenance of equipment and machines in the laboratory. The purchase of equipment's, machines and software is done with an efficient team, Purchase Committee, comprising of six senior faculties. Further, the fund is used for the payment of salary towards teaching, non-teaching staff and administrative staff. The management also supports the staff by providing registration fee for attending conferences, workshop, FDP and other technical events. The fund is also used for the purchase of online journals, magazines, text books and reference books. Further, the Institution spends for the improving the infrastructure facilities such as classroom, laboratory, hostel, library, transport, etc. Therefore, the institution utilized the fund in an optimal way to provide a better environment for the students and staff both teaching and non-teaching.

File Description	Documents
Paste link for additional information	https://stjosephs.ac.in/NAAC/AQAR%202020-2 021/6.4.3.pdf
Upload any additional information	<u>View File</u>

#### 6.5 - Internal Quality Assurance System

6.5.1 - Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing the quality assurance strategies and processes

Training and Placement Activities;

The Training and placement cell of St. Joseph's College of Engineering plays an integral role in guiding the students achieve their career goals. The Centre facilitates the training activities with the help of industry experts, alumni and corporate trainers to prepare the students industry-ready. The Centre collaborates with some of the best organizations across industries to provide on-campus job opportunities. As the students excel in their career life, St. Joseph's has always been a much favoured talent hunting ground for the corporate world. As a result, St. Joseph's has been acknowledged as one of the best institutions and has received the award from the National Employability Award by SHL(Aspiring Minds) for being among Top 10% National Level Engineering Campuses.

Students Achievements

Achievement is associated with the targeted goals or aims in life. When we define our action in relation to something like a goal a task is created. A task when fulfilled is called an achievement earned. Our students are participated many national level competitions and bagged many awards and recognitions, a few of them are National Level Hackathon All India level Technical Blog Writing Competition, Institute of scholars awarded the project based on Novelty and contribution towards the society.

File Description	Documents
Paste link for additional information	https://stjosephs.ac.in/NAAC/AQAR%202020-2 021/6.5.1%20(a)%20Amcat%20Award.pdf, https ://stjosephs.ac.in/NAAC/AQAR%202020-2021/6 .5.1%20(b)Students%20Achievements-2021.pdf
Upload any additional information	<u>View File</u>

6.5.2 - The institution reviews its teaching learning process, structures & methodologies of operations and learning outcomes at periodic intervals through IQAC set up as per norms and recorded the incremental improvement in various activities

The Following procedures are followed to achieve continuous improvement in the Academics:

Use and enrichment of ICT infrastructure

IQAC always encouraged teachers to utilize these tools in academic and laboratories. Practical sessions in laboratory cours es, as well as end-of-semester project work, are used to provide students with experience learning opportunities. Student centric participative learning methods include presentation of Technical seminars by students on topics related to curricula and working towards innovative project awards at State and National level. In addition to this students involve themselves in making working models and exhibits to be showcased during inter-collegiate symposia. Our institution has student's chapters namely SAE, ISHARE, ASHRAE, IEEE, ISTE, OSA, BRSI, ICI, CSI and IWS which facilitate students to participate in project contest involving hands on learning

Evaluation of teachers by students:

The institution has a feedback system to evaluate the teachers by students. The regular evaluation of feedback on teaching methodologies, course delivery, attitude, difficulties faced in the subject give a clear idea about the problems faced by the students. Feedback is properly analyzed and shared with the Principal, Dean, HODs and individual faculty members. The teaching-learning processes are reviewed, and improvements implemented, based on the IQAC recommendations

File Description	Documents
Paste link for additional information	https://stjosephs.ac.in/NAAC/AQAR%202020-2 021/6.5.2%20Student%20Satisfaction%20Surve y%202021.pdf
Upload any additional information	<u>View File</u>

# 6.5.3 - Quality assurance initiatives of the institution include: Regular meeting of Internal Quality Assurance Cell (IQAC); Feedback collected, analyzed and used for improvements Collaborative quality initiatives with other institution(s) Participation in NIRF any other quality audit recognized by state, national or international agencies (ISO Certification, NBA)

#### A. All of the above

File Description	Documents
Paste web link of Annual reports of Institution	https://stjosephs.ac.in/IQAC/Annual%20Report%202020-21%20final.pdf
Upload e-copies of the accreditations and certifications	<u>View File</u>
Upload any additional information	<u>View File</u>
Upload details of Quality assurance initiatives of the institution (Data Template)	<u>View File</u>

#### INSTITUTIONAL VALUES AND BEST PRACTICES

#### 7.1 - Institutional Values and Social Responsibilities

7.1.1 - Measures initiated by the Institution for the promotion of gender equity during the year

St. Joseph's College of Engineering's policy guidelines for admission, recruitment, and administrative function safeguard the interests of the students, faculty and staff members without any gender differentiation.

The following measures are strictly practiced to prevent the occurrence of social issues pertaining to gender sensitivity. The

academic ambience of the college promotes sensitivity and respect for each other. All programs offered by the college are common to all- irrespective of genders without any bias or reservation. A gender friendly classroom environment and its overall management build harmonious relations between boys and girls. Equal participation of boys and girls in teaching learning process is ensured with allocation of responsibility of organizing technical events equally to both boys and girls.

The institution aims to groom students to be self-reliant, specialists in their chosen discipline, effective communicators, respectful of different cultures, socially responsible, aware of their social and civic responsibilities, sensitive to gender issues with zero tolerance towards sexual harassment, women safety and security, and environmental consciousness.

College makes efforts to maintain gender balance among the faculty members with more than 50% of female proportion. Similarly, the numbers of women in the housekeeping departments are also high. All new faculty recruits undergo an induction program to understand the needs, concerns and characteristics of diversified people including women in the campus. The college ensures the participation of women students in intra and interinstitutional competitions and cultural activities. They are active members of cultural and sports and participate in District, University, State, and National and International level of competitions.

File Description	Documents
Annual gender sensitization action plan	https://stjosephs.ac.in/NAAC/AQAR%202020-2 021/7.1.1%20Annual%20gender%20sensitizatio n%20action%20plan.pdf
Specific facilities provided for women in terms of:a. Safety and security b. Counseling c. Common Rooms d. Day care center for young children e. Any other relevant information	https://stjosephs.ac.in/NAAC/AQAR%202020-2 021/7.1.1%20Facilities%20provided%20for%20 women.pdf

7.1.2 - The Institution has facilities for alternate sources of energy and energy conservation measures Solar energy Biogas plant Wheeling to the Grid Sensorbased energy conservation Use of LED bulbs/

B. Any 3 of the above

#### power efficient equipment

File Description	Documents
Geo tagged Photographs	<u>View File</u>
Any other relevant information	<u>View File</u>

7.1.3 - Describe the facilities in the Institution for the management of the following types of degradable and non-degradable waste (within 200 words) Solid waste management Liquid waste management Biomedical waste management E-waste management Waste recycling system Hazardous chemicals and radioactive waste management

#### Solid waste Management:

- All departments and classrooms are provided with dustbins for dry wastage which are emptied every evening.
   Segregation of waste from dustbins is done regularly.
- From the kitchen and mess the food waste is collected and given to authorized agents for further processing.

#### Liquid Waste Mangement:

- The College posses Sewage Treatment Plant to treat waste water more than 2,00,000 litres /day that are received through the underground pipe lines. The filtered water is pumped to the entire college garden through overhead tank and sprinkles.
- Special Bio-chemical wastes are disposed only after decontamination standard procedures.

#### E-waste management:

- Most of the new electronic instruments and computers are purchased under 'Buy Back Scheme' so that we do not accumulate e-waste.
- All electronic equipment used in the campus are maintained and repaired to ensure minimum e waste.
- UPS Batteries are recharged and repaired by the suppliers.

#### Waste recycling system:

• The water after the purification process is used for

- gardening.
- The one side printed papers used for further use, waste note books collected to use the note pads.
- The usable electronic components are used as spares for repair.

We don't have any Biomedical waste, Hazardous chemicals and radioactive wastes in our campus

File Description	Documents
Relevant documents like agreements / MoUs with Government and other approved agencies	<u>View File</u>
Geo tagged photographs of the facilities	<u>View File</u>

#### 7.1.4 - Water conservation facilities available in the Institution: Rain water harvesting **Bore well /Open well recharge Construction** of tanks and bunds Waste water recycling Maintenance of water bodies and distribution system in the campus

A. Any 4 or all of the above

File Description	Documents
Geo tagged photographs / videos of the facilities	<u>View File</u>
Any other relevant information	<u>View File</u>

#### 7.1.5 - Green campus initiatives include

#### 7.1.5.1 - The institutional initiatives for greening the campus are as follows:

- 1. Restricted entry of automobiles
- 2. Use of bicycles/ Battery-powered vehicles
- 3. Pedestrian-friendly pathways
- 4. Ban on use of plastic
- 5. Landscaping

A. Any 4 or All of the above

File Description	Documents
Geo tagged photos / videos of the facilities	<u>View File</u>
Various policy documents / decisions circulated for implementation	<u>View File</u>
Any other relevant documents	<u>View File</u>

#### 7.1.6 - Quality audits on environment and energy are regularly undertaken by the institution

# 7.1.6.1 - The institutional environment and energy initiatives are confirmed through the following 1.Green audit 2. Energy audit 3.Environment audit 4.Clean and green campus recognitions/awards 5. Beyond the campus environmental promotional activities

A. Any 4 or all of the above

File Description	Documents
Reports on environment and energy audits submitted by the auditing agency	<u>View File</u>
Certification by the auditing agency	<u>View File</u>
Certificates of the awards received	<u>View File</u>
Any other relevant information	<u>View File</u>

7.1.7 - The Institution has disabled-friendly, barrier free environment Built environment with ramps/lifts for easy access to classrooms. Disabled-friendly washrooms Signage including tactile path, lights, display boards and signposts Assistive technology and facilities for persons with disabilities (Divyangjan) accessible website, screen-reading software, mechanized equipment 5. Provision for enquiry and information: Human assistance, reader, scribe, soft copies of reading material, screen reading

A. Any 4 or all of the above

File Description	Documents
Geo tagged photographs / videos of the facilities	<u>View File</u>
Policy documents and information brochures on the support to be provided	<u>View File</u>
Details of the Software procured for providing the assistance	<u>View File</u>
Any other relevant information	<u>View File</u>

7.1.8 - Describe the Institutional efforts/initiatives in providing an inclusive environment i.e., tolerance and harmony towards cultural, regional, linguistic, communal socioeconomic and other diversities (within 200 words).

We believe in unity in diversity that's why our students respect the different religion, language and culture. We feel the college is our second home and all faculties like a family member. We greet and wish each other at different festivals and invite them to have a feast to get introduced with ones culture to have amicable relations and to maintain the religious, social and communal harmony. In this celebrations students wore the different attire representing the different states, religions and cultures. Through this activity students get acquainted with the different culture of our nation and help to develop the tolerance and harmony towards cultural, regional, linguistic, communal socioeconomic and other diversities. This also creates the inclusive environment in the college and society.

The Institutional initiatives towards cultural tolerance and harmony, regional, linguistic, communal socioeconomic and other diversities, includes the conduction of community based celebrations such as Onam, Deepavali, Christmas, Ifthar etc.

Our Social Cohesion activities includes various events towards providing computer literacy, Village cleaning and hygiene drives and COVID awareness programmes etc.

In addition to the above the programmes that imparts the national values such as Teachers day, Independence day and Republic day also been conducted regularly.

File Description	Documents
Supporting documents on the information provided (as reflected in the administrative and academic activities of the Institution)	<u>View File</u>
Any other relevant information	<u>View File</u>

7.1.9 - Sensitization of students and employees of the Institution to the constitutional obligations: values, rights, duties and responsibilities of citizens

#### Celebration of Independence Day:

The Independence Day (Aug 15) is celebrated in a befitting way with flag hoisting at the campus. This will be followed by the short meeting which reminds about the value of the freedom and the pain that the freedom fighters undergone. This will also be occasion to remember the soldiers and all those who protected the freedom of the country and democracy till this day.

#### Celebration of Republic Day:

The Republic Day (Jan 26) is celebrated in a befitting way with flag hoisting at the campus. The deliberation about the importance of republic status and the threats on the sovereignty of the Indian subcontinent, the role of cherishing the constitutional obligations, the status of India amidst the other countries etc.

#### Celebration of Gandhi Jayanthi- Swatchhta Pakhwada:

The Oct 2nd is celebrated in the campus. The students and inmates are encouraged to participate in the cleaning programs organized as per the direction of the swatchhta Pakhwada.

File Description	Documents
Details of activities that inculcate values; necessary to render students in to responsible citizens	https://stjosephs.ac.in/NAAC/AQAR%202020-2 021/7.1.9%20Details%20of%20activities%20th at%20inculcate%20values.pdf
Any other relevant information	https://stjosephs.ac.in/NAAC/AQAR%202020-2 021/7.1.9%20Any%20other%20relevant%20infor mation.pdf

7.1.10 - The Institution has a prescribed code of conduct for students, teachers, administrators and other staff and conducts periodic programmes in this regard. The Code of Conduct is displayed on the website There is a committee to monitor adherence to the Code of Conduct Institution organizes professional ethics programmes for students, teachers, administrators and other staff 4. Annual awareness programmes on Code of Conduct are organized

#### A. All of the above

File Description	Documents
Code of ethics policy document	<u>View File</u>
Details of the monitoring committee composition and minutes of the committee meeting, number of programmes organized, reports on the various programs etc., in support of the claims	<u>View File</u>
Any other relevant information	<u>View File</u>

### 7.1.11 - Institution celebrates / organizes national and international commemorative days, events and festivals

#### Teachers' Day

Sept 5th is celebrated as the teachers day every year. This event is organized by the students and they admire their teachers support and acknowledge the need for their blessing in their prosperity. They not only wish their teacher individually, but even make the celebration where they respect all the staff. The

college management personals also join with student community to honour the teachers and appreciations will be made during the meeting. The students entertained their respective department's faculty members with unique shows on that special day. Our Management gave gifts to all the teachers of our college as a token of appreciation.

#### Republic Day

The Republic Day (Jan 26) is celebrated in a befitting way with flag hoisting at the campus. The deliberation about the importance of republic status and the threats on the sovereignty of the Indian subcontinent, the role of cherishing the constitutional obligations, the status of India amidst the other countries etc.

Celebration of Gandhi Jayanthi- Swatchhta Pakhwada:

The Oct 2nd is celebrated in the campus. The students and inmates are encouraged to participate in the cleaning programs organized as per the direction of the swatchhta Pakhwada.

#### Vinayaka Chathurthi

Our college celebrated Vinayaka Chathurthi on 17th September 2021, by decorating Ganesha's statue of our college temple with flowers. Pooja was grandly performed in the temple in the presence of our beloved Chairman's family. Delicious food was offered to the Lord and Kozhakatai was distributed to the students. Many students came forward to participate on that occasion filled with all blessings of Ganesha.

#### Ayudha Pooja

Our College celebrated Ayudha Pooja on 13th October 2021, by arranging Kolu for 9 days in our college from the day of Mahalaya Amavasya till Vijayadasami. On this special day, all the Laboratories and Office were beautified with plantain trees, mango leaves and glazing papers followed by a pooja in the presence of Chairman's family. The remarkable part of this celebration was the mouth-watering lunch, sweets and ice creams that were served for all the students and staff. Gift vouchers for deepavali were distributed on the day of Ayudha pooja to Administrative staff, Technical staff, Non-Technical staff, Drivers, Sweepers, workers in the mess and daily wage workers.

File Description	Documents
Annual report of the celebrations and commemorative events for the last (During the year)	<u>View File</u>
Geo tagged photographs of some of the events	<u>View File</u>
Any other relevant information	<u>View File</u>

#### 7.2 - Best Practices

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

Best Practice 1

Title of the Practice

St. Joseph's measures towards creating better Learning Ambiance for Student community during lockdown period

Objectives of the Practice

To engage college and school level students through various virtual activities and competitions aiming to impart Engineering awareness, Problem solving skill, Aptitude enhancement, Presentation skill, Puzzle solving skill and to provoke other inherent qualities of an individual

#### The Context

Current COVID outbreak and subsequent Lockdown made our student community 'inert' by both physically and mentally. This problem is more realized currently because this lock down is trying to be a hurdle in the process of continuous learning of teachers and students.

By understanding this current crux of pandemic, our institution has provided high priority to student community learning and made them abreast with current online trends and not allow them to lose their interest in the subject. The entire student community were targeted and engaged them through various virtual activities and competitions.

The Practice

In order to drive away the shyness among rural dwelling students and bring them to forefront in demonstrations and competitions, our college has formulated various technical clubs among students, where the students themselves are forming groups and do the co-curricular and extracurricular activities under the guidance of staff members. St. Joseph's College of Engineering in collaboration with the IEEE Students Branch Chapter had taken steps to provide a wider knowledge of emerging technologies internationally.

These kind of activity-oriented learning makes the minds busy and well-tuned towards productive learning and not being idle. School Students with a strong mind would explore better higher education thus an early college awareness is a key step to raise their aspirations to access opportunities. This noble act would have initiated a mass movement among school students towards engineering awareness to rightly plan their future career.

Evidences of Success

#### NATIONAL LEVEL QUIZ COMPETITION:

As a part of the 74th Independence Day Celebrations, IEEE Student Branch Chapter of St. Joseph's College of Engineering conducted a 'National level Quiz Competition' for the remembrance of our Indian History with different types of questions on the date between 15th August to 22nd August 2020. The quiz theme consists of our Indian history.

#### JAW BREAKERS:

A special program named 'Jaw Breakers' were designed conduced for 10 days for the participants from various Schools, Colleges and Institutions with an overall aim of Tongue Twister aided Language development and Vocabulary knowledge boost in day to day life. Events like this helped the entire student community to relax their mind and engage in useful activities that help people to get away from the negativity of pandemic situation.

#### QUIZ FEST:

Quiz fest Event was organized for 18 Days for 12th Standard students and Diploma Students from various schools & Colleges. Quiz on various topics includes sports, current affairs, global warming, landmark, science, mathematics, space, technology & development, global warming, history of India, Inventors &

inventions, landmark, Planets, corona awareness respectively.

#### EPOCH 3:

It was the School student's webinar were conducted (through Google Meeting), for 6 days in the month of July 2020. The remarkable topics were as follows

- 'Emotional Intelligence' which is the ability to understand, use, and manage your own emotions in positive ways to relieve stress, communicate effectively, empathize with others, overcome challenges and defuse conflict Social awareness etc.
- 2. 'Obstacles needed to be faced for a successful life' it's a case study in which how successful people approach problems and whereas others see impenetrable barriers, they see challenges to embrace and obstacles to overcome etc.
- 3. 'Nanotechnology' it's the engineering of functional systems at the molecular scale which covers both current work and concepts that are more advanced.
- 4. 'Traditional cultural Methods and its uses' The South Indian Culture towards essentially the celebration of the eternal universe through the celebration of the beauty of the body and femininity. It is exemplified through its dance, clothing, and sculpture South India is a heterogeneous combination of culturally and linguistically different people.
- 5. Discipline in Students Life Discipline brings stability and structure into a person's life. It teaches a person to be responsible and respectful. The observance of well-defined rules is the basis of society. It promotes good human behavior to better society and make it a more enjoyable place for everyone to live

#### SUDOKU:

The Sudoku Game was organized for 13 days in the month of July and August 2020 for the participants from various Schools, Colleges. The participants had enjoyed solving the puzzle. Events like this helped the people to relax their mind and engage in useful activities that also helped people to get away from the negativity of pandemic situation.

Problems encountered and Resource required

The success of any program lies on its method of implementation.

That too the online events were special in its implementation by means of the following factors

- Meticulous planning and scheduling were required and it had to be communicated well in advance through all sorts of media platforms.
- 2. A well-defined online platform was needed and the operational difficulties if any, were need to be well educated to the users in advance, in order to avoid any sort of technical delay.
- 3. A user-friendly method had to be adopted in every stage of implementation, since the target audience were with varied technical background and knowledge.
- 4. A high-speed internet connectivity had to be ensured from the host end and the same is expected from the user end.
- 5. Often the participants from the rural areas were dependent only on mobile based network which had created slanginess in video conferencing and presentation.

Thus, the above best practice of St. Joseph's College of Engineering, proved an effective special method of keeping good learning habit and harnessing the individual skills towards betterment of their personality development and career enhancement.

Best Practice 2

Title of the Practice

St. Joseph's measures on COVID Awareness and Rehabilitation

Objectives of the Practice

To educate the needed sector of community towards COVID pandemic spread and various precautionary measures to curtail the infection and also to extend support and contributions towards their livelihood during pandemic lockdown period.

The Context

St. Joseph's College of Engineering is a place of knowledge and virtues. The Students and Faculty of our college are keen and focused towards their contribution to the societal welfare. It's a renowned fact that the Society will emerge to be a better

healthy place only if the children of under-privileged are provided with the best of the knowledge on health education and hyenine practices.

The current COVID pandemic has thrown the livelihood of lakhs into a chaotic twister. We the St. Josephites are dedicated with the motto of imparting awareness about currently pandemic outbreak and especially to women and under privileged rural school children and to offer support to regain their livelihood.

#### The Practice

St. Josephs, had formulated teams for the purpose of making COVID awareness and rehabilitation with the composition of volunteering teaching and non-teaching staffs from various departments, students and associating NGO members etc.

These volunteering teams had successfully conducted Safety and Hygiene programs and campaigns in the adopted rural villages. It had conducted an initial survey about the needs of the targeted locality and accordingly the services such as cleaning the surroundings, common places were performed.

Apart from the above rural village services, during the period of National lockdown, through online mode, the virtual activities were conducted for the past 8 months for the society in making awareness about infections and containment measures etc.

Evidences of Success

#### ACTIVITIES THROUGH UNNAT BHARAT ABHIYAN:

St. Joseph's enthusiastically extended support under the National scheme of *Unnati Bharat Abhiyan*, where 80 students along with 6 faculty members have performed a baseline survey completed and uploaded in UBA portal, regarding the lifestyle and basic requirements of adopted villages at Kanchipuram. The team had discussions with Kanchipuram *Tahsildar* and revenue Inspectors regarding UBA Baseline survey and with their consent, the students had conducted Gram Sabha meetings with villagers and administrative peoples and narrated the importance of hygiene and keeping our environment pollution free etc.

DISTRIBUTION OF SANITIZER TO ENSURE HYGENE:

Keeping every place of the adopted villages clean and hygiene is the primary motto of our management since it is related to the health of the community. To meet this requirement, we had regular distribution of indigenous manufactured 'Detergent based soap liquid sanitizer' towards the usage of village cleaning purposes without any commercial commitment. The formula and SOP for manufacturing were developed by our expert faculty team. In addition to village cleaning, on a daily basis this liquid sanitizer was distributed to the in-house housekeeping and Maintenance staff for Cleaning, laboratories, library, Mess halls, Administrative and placement block etc.

#### DISTRIBUTION OF GROCERY AND OTHER ESSENTIAL GOODS:

Our Institutions had stepped into contribution of the poor and needy daily wages, foot path vendors and migrant laborer whose livelihood was sniffled out by the lockdown. A pack containing essential cooking items such as 5kg rice, 1kg dhal, 1 liter of cooking oil and other groceries were distributed. Using our college vehicles, these food materials have been donated to various parts of Chennai and other districts. By joining hands with the Government of Tamil Nadu, our institution has enlightened more than 10,000 families by distributing groceries worth more than 50 lakhs rupees.

#### CREATING COVID AWARENESS THROUGH ONLINE MODE:

The current outbreak of pandemic infection and subsequent lockdown measures, were not a limiting factor for our institution from reaching the school students. Through online mode, the virtual activities were conducted towards making awareness about infections and containment measures etc.

To main focus of these programs were towards the scope in the engineering world for environmental and social issues & Woman welfare, finding solutions for pandemic situation through electronics, Sanitization and Sterilization, Protective Equipment, Crowd management assistive systems, Technologies for Health care & Medical Diagnosis and Apps usage etc.

Through online mode there were several school programs conducted in terms of Competitions, Challenges, Seminars and Workshops by keeping the motto of COVID awareness and safety. We had organized online events exclusively for 11th,12th and Diploma students by the OSA student chapter under the topic of Online Challenges for young minds. Students were asked to find solutions for the

current pandemic situation Covid-19 through Electronics in terms of Video presentation, PPT and model demonstration through Google Meet.

Our unique, remarkable, social outreach visits to Rural Schools / Orphanage Homes under the banner of 'Vidivelli' have fulfilled their daily needs and also created educational awareness to innumerable number of children through competitions.

For the past 8 months even during current pandemic period, our noteworthy online School programs through Competitions, Challenges, Seminars and Workshops towards COVID awareness and safety, Effective usage of Internet resources, Websites and Apps etc., were appreciated and honored with 'Utkrisht Viswakarma award 2020' by AICTE.

Problems encountered and Resource required

The success of any program lies on its planning and effective utilization of resources and implementation. During March, April and May months there was a rapid spread of pandemic infection in the surrounding which was a tough task for the volunteers to execute the services and supply and reach of other rehabilitation goods to the needy people.

Since lockdown measures have completely hampered the transportation, the act of mobilizing the essential goods to various areas of adopted villages was a big problem. With the prior official permission from State Government of Tamil Nadu, our college transportation facility resources were well utilized for the good supply and mobilization.

During the period of National level complete lockdown, our measures towards of COVID awareness creation had been restricted towards, online mode, targeting the school level children of rural areas. These measures encountered several technical barriers in terms of sourcing and user-friendly online platforms, high speed internet connectivity, availability of mobile, laptop and other devices at target locations etc.

In spite of these practical issues in implementations, our institution had shouldered the responsibility in provoking COVID awareness, Safety and Hygiene and Supply of essential commodities such as grocery, medicine, gloves, masks and sanitizers etc.

Thus, with the support of our students we had successfully ruled

out the fear about COVID infection and taught all the means of preventing it and imparted through Scientific and Technological developments in the young minds about so as to groom them as responsible Engineers of tomorrow.

File Description	Documents
Best practices in the Institutional website	https://stjosephs.ac.in/NAAC/AQAR%202020-2 021/7.2%20Best%20practices%20in%20the%20In stitutional%20website.pdf
Any other relevant information	https://stjosephs.ac.in/NAAC/AQAR%202020-2 021/7.2%20Best%20Pratices.pdf

#### 7.3 - Institutional Distinctiveness

7.3.1 - Portray the performance of the Institution in one area distinctive to its priority and thrust within 200 words

St. Joseph's support to Government Initiatives during COVID Pandemic

To curtail COVID spread, our institution had joined hands with the Government and supported various Government authorities in implementing their schemes against spread and prevention.

#### COVID Quarantine Centre:

Our college readily responded to Tamil Nadu Health Ministry and provided part of our campus as quarantine center for COVID by providing 500 beds in hostel rooms with bath attachments facility

#### COVID Awareness programs:

We made group with students, teaching and non-teaching faculty and conducted many campaigns to give awareness to our stake holders and general public. In addition, organized various online webinars with professional doctors in order to throw more light regarding spread of COVID infection.

#### Free Engineering education:

In view of recognizing the incomparable services of the COVID frontline workers, our management has decided to give free management quota engineering seats to the deserving wards of the

police personals and health personals.

#### Campus Initiatives

By joining hands with the Government of Tamil Nadu, our institution had enlightened more than 10,000 families by distributing groceries worth more than 50 lakhs rupees especially to needy daily wages, footpath vendors and migrant laborers whose livelihood was sniffed out by the lockdown.

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

#### 7.3.2 - Plan of action for the next academic year

The primary objective of this educational institution is to create temples of knowledge so as to impart value based education to the present and future generations of our country.

All our academic practices have compassion on Student centric programs comprising, traditional, contemporary as well as global practices in academic, co-curricular, extra-curricular and sports activities for holistic development

To take advantage of our Strengths in terms of Academic Excellence, Research Potential, Infrastructural and Learning resources

- 1. To overcome our Weaknesses in the areas of Industry oriented Consultancy Activities
- 2. To attract sizeable research funds from the Government funding agencies
- 3. To produce more than 95 % success rate.
- To attract more core company campus placements for noncomputer science students