

Yearly Status Report - 2019-2020

| Part 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 own campus | Yes | | | |
| Phone no/Alternate Phone no. | 044-24503237 | | | |
| Mobile no. | 9444069916 | | | |
| Registered Email | principal@stjosephs.ac.in | | | |
| Alternate Email | raosvaddi@gmail.com | | | |
| Address | OLD MAMMALLAPURAM ROAD, CHENNAI-119 | | | |
| City/Town | CHENNAI | | | |
| State/UT | Tamil Nadu | | | |
| Pincode | 600119 | | | |
| 2. Institutional Status | | | | |

| Affiliated / Constituent | Affiliated |
|---|--|
| Type of Institution | Co-education |
| Location | Urban |
| Financial Status | Self financed |
| Name of the IQAC co-ordinator/Director | Dr.N.Arunkumar |
| Phone no/Alternate Phone no. | 04424501060 |
| Mobile no. | 9840009626 |
| Registered Email | iqac@stjosephs.ac.in |
| Alternate Email | hodmechstudentaffairs@stjosephs.ac.in |
| 3. Website Address | |
| Web-link of the AQAR: (Previous Academic Year) | https://stjosephs.ac.in/NAAC/AQAR%20 2018-2019%20Report.pdf |
| 4. Whether Academic Calendar prepared during the year | Yes |
| if yes,whether it is uploaded in the institutional website: Weblink: | https://stjosephs.ac.in/NAAC/Academic%2 OCalendar%202019-20.pdf |

5. Accrediation Details

| Cycle | Grade | CGPA | Year of | Vali | dity |
|-------|-------|------|--------------|-------------|-------------|
| | | | Accrediation | Period From | Period To |
| 1 | A+ | 3.46 | 2019 | 09-Aug-2019 | 08-Aug-2024 |

6. Date of Establishment of IQAC 17-Sep-2018

7. Internal Quality Assurance System

| Quality initiatives by IQAC during the year for promoting quality culture | | | | |
|---|-------------------|----|--|--|
| Item /Title of the quality initiative by IQAC Date & Duration Number of participants/ beneficiaries | | | | |
| IQAC Meetings are Conducted | 16-Oct-2019 01 | 25 | | |
| IQAC Meetings are | 12-Mar-2020 | 25 | | |

| Conducted | 01 | |
|--|-------------------|------|
| Feedback from Students | 20-Dec-2019 01 | 5430 |
| Feedback from Teachers | 20-Dec-2019 01 | 319 |
| Feedback from Parents | 14-Feb-2020 01 | 256 |
| Feedback from Alumni | 14-Feb-2020 01 | 256 |
| Analysis of Feedback | 13-Mar-2020 01 | 6261 |
| Internal Academic Administrative Audit (AAA) | 02-Mar-2020 01 | 11 |
| External Academic Administrative Audit (AAA) | 09-Mar-2020 01 | 11 |
| NIRF | 28-Nov-2019 01 | 11 |
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8. Provide the list of funds by Central/ State Government- UGC/CSIR/DST/DBT/ICMR/TEQIP/World Bank/CPE of UGC etc.

| Institution/Departmen t/Faculty | Scheme | Funding Agency | Year of award with duration | Amount |
|---|---|---|-----------------------------|---------|
| Dr.N.Arunkumar Mechanical | Short Term Training Programme | AICTE, New Delhi | 2020 18 | 300000 |
| Dr.M.Chamundees wari Biotechnology | Innovation, Technology Development and Deployment | Department of Science and Technology, Govt. of India | 2019 730 | 1860408 |
| Dr.G.Sreekumar Dr.C.Karthik Biotechnology | MODROB'S | AICTE, New Delhi | 2020 365 | 1200000 |
| Dr.R.Baskaran Chemical | Short Term Training Programme | AICTE, New Delhi | 2020 18 | 300000 |
| Dr.V.Muthulaksh mi Information Technology | Unnat Bharat Abhiyan | Government of Tamil Nadu (UBA) | 2018 730 | 50000 |
| Mr. P. Sri Balaji Civil Engg. | Students Project Scheme | Tamil Nadu State Council for Science and Technology | 2020 365 | 7500 |
| Dr. A. Tamizhselvi Information Technology | Students Project Scheme | Tamil Nadu State Council for Science and Technology | 2020 365 | 7500 |

| Mr. M. Lingeshwaran ECE | Students Project Scheme | Tamil Nadu State Council for Science and Technology | 2020 365 | 7500 |
|------------------------------------|----------------------------|--|-------------|------|
| Dr. P. Velmurugan EEE | Students Project Scheme | Tamil Nadu State Council for Science and Technology | 2020 365 | 7500 |
| Mr. J. Vijayanand Mechanical | Students Project Scheme | Tamil Nadu State Council for Science and Technology | 2020 365 | 7500 |
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| 9. Whether composition of IQAC as per latest NAAC guidelines: | Yes |
|--|------------------|
| Upload latest notification of formation of IQAC | <u>View File</u> |
| 10. Number of IQAC meetings held during the year : | 2 |
| The minutes of IQAC meeting and compliances to the decisions have been uploaded on the institutional website | Yes |
| Upload the minutes of meeting and action taken report | <u>View File</u> |
| 11. Whether IQAC received funding from any of the funding agency to support its activities during the year? | No |

12. 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), Green Audit, Waster Audit, Carbon Foot Print, Energy Audit Academic and Administrative Audits of all departments of Institution and its Followup action Feedback from stakeholders and its Analysis to improve Teaching Learning process Value added courses Preplacement 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.

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

| Plan of Action | Achivements/Outcomes |
|------------------------------------|---|
| Funds received from funding agency | 10 projects worth of Rs31,62,908/- is undergoing in college |
| Patents Awarded by IPR | Two awards attained from IPR-INDIA(one for patent and other one for software Copyrights) |
| Journal Publications | More focus on scopus journal publications 122 publications in this current Academic Year. |
| Organising Conferences | International Conference ICTAMDMES'20 organized by Department of Mechanical Engineering on 20th and 21st February 2020 |
| 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 |
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14. Whether AQAR was placed before statutory body ?

Yes

| Name of Statutory Body | Meeting Date |
|---|---|
| Governing Council | 16-Mar-2020 |
| 15. Whether NAAC/or any other accredited body(s) visited IQAC or interacted with it to assess the functioning ? | No |
| 16. Whether institutional data submitted to AISHE: | Yes |
| Year of Submission | 2020 |
| Date of Submission | 27-Feb-2020 |
| 17. Does the Institution have Management Information System ? | Yes |
| If yes, give a brief descripiton and a list of modules currently operational (maximum 500 words) | Management Information System currently operational in our college are listed below 1. Admin Portal 2. Staff Portal |

3. Salary 4. Bio Metric 5. Automated Result Analysis 6. Automated Question Paper Generation 7. AUTO LIB ADMIN PORTAL: An Admin portal is a secure site where you can easily share and maintain a centralized information management within our institution. The ultimate goal of this portal is for ease communication, collaboration and document sharing for people within the college, so that the staffs and students can access their need at right time through their student and staff portal login access. STAFF PORTAL A staff portal is a secure site where you can easily share and access information within our institution, and keep all your staff on the same page. The ultimate goal of this portal is for ease communication, collaboration and document sharing for people within the college, so that the students can access their need at right time through their student portal login access. SALARY InooeOps is the software used by the institution for the calculation of the salary of the teaching and non teaching staff. It includes all the details regarding the basic pay Dearness allowance, the house rent allowances the gross pay details along with the pf, income tax, loss of pay and other deductions BIO METRIC The daily log in and logout details are registered and verified by the bio metric software. It also calculates the details regarding the leave, absent and loss of pay of the faculty and staff members. AUTOMATED RESULT ANALYSIS: This software provides students and staff an effective approach to keep track of college results by maintaining it through website. It helps the staff members to view and download various result analysis formats. It also helps students and parents to check the their ward results and progress through online. AUTOMATED QUESTION PAPER GENERATION This software is used to generate question paper for the internal continuous assessments examinations using the question bank submitted by the respective subject faculty. AUTO LIB The software maintains all the activities of the library such as transactions, catalouging, data updating, serial control, sercing all types of documents

report generating etc. ONLINE FEDBACK SYSTEM This software helps to get the feedback of the faculty from the students. It also generates an consolidated report of the faculty of the department.

Part B

CRITERION I – CURRICULAR ASPECTS

1.1 - Curriculum Planning and Implementation

1.1.1 – Institution has the mechanism for well planned curriculum delivery and documentation. Explain in 500 words

Effective curriculum delivery is carried out in the Institution through a welldocumented 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. Hard copies of question bank and lab manual are also provided to the students. • 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 by getting feedback from the students through Class Monitoring Committee (CMC) and Head of the Department. ulletUnit wise syllabus coverage and deviations from the lesson plan will be periodically reviewed by the Head of the Department and are addressed 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, model based learning and additional assignments relevant to the subjects are provided to the students. • To supplement the curricular gaps in this academic year, 34 Guest lecture on topics covering recent trends were arranged with experts drawn from academia and industry, 36 courses for value addition related to the subjects are conducted to the students to facilitate hands on experience on concepts learnt in the class room sessions, 57 Industrial visits were arranged for the students to gain exposure to practical aspects of the concepts learnt in the class rooms and current industrial practices. • Effectiveness of course delivery is ascertained also through the performance of students in 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.

1.1.2 - Certificate/ Diploma Courses introduced during the academic year

Certificate Diploma Courses Dates of Duration Focus on employ Skill

| | | Introduction | | ability/entreprene urship | Development |
|--|-----|--------------|---|------------------------------|--|
| Corporate Readiness Programme | Nil | 09/10/2019 | 5 | Employabil ity | To gain key corporate and soft kills |
| NISM Certi fication | Nil | 17/07/2019 | 5 | Employabil ity | To learn products traded, risk, market participants and legal framework in Financial markets |
| E TABS | Nil | 27/06/2019 | 5 | Employabil ity | Hands on experience in developing software |
| Web Develo pment,Roboti cs Automation, Embedded Sys tem,Machine Learning,Cyb er Security | Nil | 20/06/2019 | 6 | Employabil ity | To impart robotics, ML, web development, Cyber Security, |
| Industrial Robotics | Nil | 26/06/2019 | 6 | Employabil ity | Industrial Robotics -Programming Robot Motion and Hands of experience in Robotic Manipulation using Hand held Manipulators |
| Passenger Car, Motor Cycle Engine, Transmission and Motor Cycle Overhauling | Nil | 20/06/2019 | 6 | Employabil ity | Complete 2 Wheeler and 4 Wheeler- Mechanisms Service and Maintenance |
| Rational Drug Design | Nil | 01/07/2020 | 5 | Employabil ity | To have an exposure on Drug Design |
| Sensor Application using Arduino and | Nil | 20/06/2019 | 5 | Embedded Engineer | This course provides detailed |

| Raspberry PI (EVA027) | | | | | sensor knowledge and professional Programming Skill. |
|---|-----|------------|---|------------------------------------|--|
| Solar PV system design and installation (EVA028) | Nil | 20/06/2019 | 5 | Solar installation | This Course provides the detailed Hardware Assembly Skillset |
| Design and development of Robotics (EVA029) | Nil | 20/06/2019 | 5 | Design Engineer for Robotics | This course provides the Programming and hardware development skill for robotics. |
| Design of transformer and amplifier circuit (EVA030) | Nil | 20/06/2019 | 5 | Design Engineer | This course provides the skill to develop the design knowledge on transformer and Amplifier circuit |
| Intelligent Instrumentat ion and Automation | Nil | 20/06/2019 | 6 | Automation Engineer | To learn about intelligent instrumentat ion to address industrial automation using PLC and DCS |
| Internet of Things using Raspberry Pi | Nil | 24/06/2019 | 6 | IoT Engineer | To learn the latest t echnological development by giving Industrial hands on training in latest open source hardware and software development tools. |

| | Factory Automation | Nil | 24/06/2019 | 6 | Instrument ation Maintenance Engineer | To learn about recent trends in Factory automation with hands on training to address I nstrumentati on problems using PLC |
|---|--------------------------------------|-----|------------|---|--|---|
| | Digital Image Processing | Nil | 27/06/2019 | 5 | simulations on Digital image | and DCS To learn about compre hensive set of reference- |
| | | | | | processing | standard algorithms and workflow application for image processing, analysis, vi sualization, and algorithm development |
| | IOT using ARDUINO | Nil | 27/06/2019 | 5 | Projects using IOT | To learn and achieve an IoT application with a basic components. |
| , | Machine learning techniques | Nil | 27/06/2019 | 5 | Projects using Machine learning. | To gain knowledge about machin e-learning models |
| | Robotics | Nil | 27/06/2019 | 5 | Design on Robotics | To gain practical knowledge to do projects in Embedded Robotics |
| ; | Industrial and Home automation | Nil | 21/06/2019 | 6 | Automation Engineer | To learn programming of PLC and programming and implemen tation of IOT application using NodeMCU |
| | Corporate | Nil | 09/10/2019 | 5 | Employabil | To gain |

| Readiness Programme | | | | ity | key corporate and soft skills |
|------------------------|-----|------------|---|-------------------|--|
| NISM Certi fication | Nil | 17/07/2019 | 5 | Employabil ity | To learn products traded, risk, market participants and legal framework in Financial markets |

1.2 - Academic Flexibility

1.2.1 - New programmes/courses introduced during the academic year

| Programme/Course | Programme Specialization | Dates of Introduction |
|------------------|--------------------------|-----------------------|
| Nill | NIL | Nill |
| | No file uploaded. | |

1.2.2 – Programmes in which Choice Based Credit System (CBCS)/Elective course system implemented at the affiliated Colleges (if applicable) during the academic year.

| Name of programmes adopting CBCS | Programme Specialization | Date of implementation of CBCS/Elective Course System |
|----------------------------------|---|---|
| BE | Mechanical Engineering | 01/06/2019 |
| BE | Electrical and Electronics Engineering | 01/06/2019 |
| BE | Electronics and Communication Engineering | 01/06/2019 |
| BE | Electronics and Instrumentation Engineering | 01/06/2019 |
| BE | Instrumentation and Control Engineering | 01/06/2019 |
| BE | Computer Science Engineering | 01/06/2019 |
| BTech | Information Technology | 01/06/2019 |
| BTech | Chemical Engineering | 01/06/2019 |
| BTech | Bio Technology | 01/06/2019 |
| BE | Civil Engineering | 01/06/2019 |
| ME | Software Engineering | 01/06/2019 |
| ME | Manufacturing Engineering | 01/06/2019 |
| ME | Applied Electronics | 01/06/2019 |
| ME | Computer Science and Engineering | 01/06/2019 |
| ME | Control and Instrumentation Engineering | 01/06/2019 |

| ME | Embedded Systems Technologies | 01/06/2019 |
|----------------|---------------------------------------|------------|
| ME | Power Electronics and Drives | 01/06/2019 |
| ME | Power Systems Engineering | 01/06/2019 |
| Mtech | Biotechnology | 01/06/2019 |
| MBA | Masters of Business Administration | 01/06/2019 |
| Integrated(PG) | Master of Business Administration | 01/06/2019 |

1.2.3 – Students enrolled in Certificate/ Diploma Courses introduced during the year

| | Certificate | Diploma Course |
|--------------------|-------------|----------------|
| Number of Students | 1559 | Nil |

1.3 – Curriculum Enrichment

1.3.1 – Value-added courses imparting transferable and life skills offered during the year

| Value Added Courses | Date of Introduction | Number of Students Enrolled |
|--|----------------------|-----------------------------|
| Fundamentals of Capital Markets | 03/03/2020 | 116 |
| Placement ready programme | 09/10/2019 | 118 |
| Securities Operations Risk Management - NISM Certification | 17/07/2019 | 75 |
| Sales Training | 17/07/2019 | 50 |
| Communication skill - I yr (2019-23 batch) | 20/09/2019 | 1075 |
| Aptitude crash course - I yr | 06/01/2020 | 1069 |
| C programming - II yr | 10/02/2020 | 1203 |
| Aptitude crash course - II yr | 12/06/2019 | 1204 |
| Advanced C training - III yr | 27/11/2020 | 1036 |
| Pop Training - IV yr | 03/06/2019 | 968 |
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1.3.2 - Field Projects / Internships under taken during the year

| Project/Programme Title | Programme Specialization | No. of students enrolled for Field Projects / Internships |
|-------------------------|--------------------------|--|
| BE | CSE | 516 |
| BE | ECE | 538 |
| BE | EEE | 487 |
| BTech | IT | 465 |

| BE | EIE | 435 | |
|------------------|----------|-----|--|
| BE | ICE | 124 | |
| BTech | BIO TECH | 164 | |
| BTech | CHEM | 191 | |
| BE | CIVIL | 190 | |
| MBA | Nill | 143 | |
| <u>View File</u> | | | |

1.4 - Feedback System

1.4.1 – Whether structured feedback received from all the stakeholders.

| Students | Yes |
|-----------|-----|
| Teachers | Yes |
| Employers | Yes |
| Alumni | Yes |
| Parents | Yes |

1.4.2 – How the feedback obtained is being analyzed and utilized for overall development of the institution? (maximum 500 words)

Feedback Obtained

On a regular basis our Institute connects with all its stake holders to collect feedback in order to utilize them for overall development of the institution. Various feedbacks collected from currently studying students, Alumni, Teachers, Parents and Employers are discussed, analyzed and laid as the basis for future plans. By conducting meetings through various administrative bodies of the institution from the management to every staff member at various levels along with its stake holders actively engage them to collect feedbacks from one another, also informing the latest developments in their arena. The feedback collected from various stakeholders are analysed by the respective department academic committee (DAC) members and they identifies the shortcomings and improvement areas that has to be implemented in the department level and college level. The department level feedback are discussed in the department meeting and necessary initiatives and measures are taken with the concern of principal. The curriculum feedback is represented to University with Principal approval and through our college board of studies members (BOS) and syllabus committee members. The college level feedback is informed by the head of the concern department to academic council members (ACM) headed by the principal. After three weeks of the commencement of semester, the students were encouraged to give online feedback for the subject as well as subject teacher through a structured questionnaire designed with focus on every aspect of Teaching Learning Process and other administrative process. In case of Teacher with lower feedback scores, he / she are advised by the Principal, instructed to improve their performance and teaching parameters. If teacher is in need of any shortcoming of teaching aids, it is provided immediately so that knowledge transfer process should not get hampered. Curriculum feedback at the end of each semester and program exit feedback from the students of final semester are taken to analyze the understanding capability of the students for a given program. Feedbacks on the infrastructural facilities are taken from the final year students at the end of the program for improving the lab facilities, if any. Feedbacks from the parents are taken by interacting with them during Parent Teacher Meet. The attendance, results and other related information of each student is shared with the parents to make them to know the academic progress of their ward. Feedback is taken from alumni and from the companies

for suggestions or improvements in the curriculum towards industrial requirements. The feedbacks are collected from placement support training providers by training and placement cell. Based on the feedback collected ACM meeting is conducted on regular basis which is presided by the principal. The minutes of previous meetings are presented and measures are taken to advance the fluidity and functionality of the administration. These meetings also discuss the feedback obtained at various levels of the college and decide upon future strategies and the members discuss at length on teaching-learning challenges, co curricular activities, new updates, and upcoming seminars and conferences etc. These meetings concentrate much on preventive measures against negative feedbacks.

CRITERION II – TEACHING- LEARNING AND EVALUATION

2.1 - Student Enrolment and Profile

2.1.1 - Demand Ratio during the year

| Name of the Programme | Programme Specialization | Number of seats available | Number of Application received | Students Enrolled | |
|--------------------------|--|---------------------------|-----------------------------------|-------------------|--|
| BTech | Biotechnology | 60 | 70 | 58 | |
| BTech | Chemical Engineering | 60 | 55 | 53 | |
| BE | Civil Engineering | 60 | 52 | 47 | |
| BE | Computer Science and Engineering | 180 | 232 | 193 | |
| BE | Electrical and Electronics Engineering | 180 | 171 | 159 | |
| BE | Electronics and Communication Engineering | 180 | 201 | 180 | |
| BE | Electronics and Instrumentation Engineering | 180 | 59 | 49 | |
| BTech | Information Technology | 180 | 222 | 190 | |
| BE | Instrumentation and Control Engineering | 60 | 14 | 13 | |
| BE | Mechanical Engineering | 180 | 184 | 160 | |
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2.2 - Catering to Student Diversity

2.2.1 – Student - Full time teacher ratio (current year data)

| Year | Number of | Number of | Number of | Number of | Number of teachers teaching both UG |
|------|--------------------|--------------------|-------------------|-------------------|-------------------------------------|
| | students enrolled | students enrolled | fulltime teachers | fulltime teachers | teachers |
| | in the institution | in the institution | available in the | available in the | teaching both UG |
| | | | | | |

| | (UG) | (PG) | institution teaching only UG courses | institution teaching only PG courses | and PG courses |
|------|------|------|--|--|----------------|
| 2019 | 5056 | 374 | 274 | 21 | 24 |

2.3 - Teaching - Learning Process

2.3.1 – Percentage of teachers using ICT for effective teaching with Learning Management Systems (LMS), Elearning resources etc. (current year data)

| Number of Teachers on Roll | Number of teachers using ICT (LMS, e- Resources) | ICT Tools and resources available | Number of ICT enabled Classrooms | Numberof smart classrooms | E-resources and techniques used |
|-------------------------------|---|-----------------------------------|--|---------------------------|---------------------------------|
| 319 | 319 | 17 | 85 | 12 | 9 |

View File of ICT Tools and resources

View File of E-resources and techniques used

2.3.2 – Students mentoring system available in the institution? Give details. (maximum 500 words)

Mentoring is often looked to by faculty and administrators as a means to integrate and connect undergraduate students with the academic experience. Faculty mentors play a vital role in graduate mentorships. Students and their mentors share a duty to maintain positive and fulfilling relationships with mentors. Both parties have a part to play in the mentoring success. A mentor is someone who represents the graduate students. For graduate students, a mentor is someone who serves as a guide throughout their four years of study. They give technical and personal guidance on the move into and out of graduate school. They have positive reviews on the Reading, teaching, and other career growth components. We can serve to help students align their personal life with professional goals or provide emotional support during challenging times. Students Mentoring system is being introduced at St. Joseph's College of Engineering, with the following objectives: • To help undergraduate fresh students understand the challenges and opportunities present in the Institute and develop a smooth transition to campus life. • Providing a reliable and comprehensive system of support to motivate students to excel Academic and non-academic fields and to make the most of their Institute life • To counsel first year students who are academically poor, and to play an significant role in helping struggling students deal with academic, extraacademic and personal issues. Structure of Student Monitoring System This program deals mainly with undergraduate students in their first year. Senior students, called Student Mentors (SMs), are responsible for helping adjust a set of fresh students in the first year to the new environment and then monitoring their progress throughout the year. HoD (Student Affairs) - Chair Person Faculty Mentor - Co-ordinator Student Mentor-1 -Member Student Mentor-2 - Member Student Mentor-3 - Member Student Mentor Selected students from the III year course will constitute the team of Institutional SMs. Each of them would be assigned a group of first year students (15 to 20). Each Student Mentor reports directly to the Faculty Mentor. He/she would be the direct point of interaction with the first year students and may report special cases for the consideration to HoD. Role of faculty and student mentors • Identify strengths and weaknesses in all fields of the student mentees • Identify hobbies and fields of their interests. • Guide and motivate to improve their results. • Knowing their academic and psychological needs and guiding them accordingly • Conducting regular counselling sessions for building discipline. • Encouragement and Orientation provided in developing enthusiasm to participate in multiskilled activities such as curricular, co-curricular and extra-curricular • Collect feedback to strengthen the feedback system and achieve desired results on different aspects. • Taking feedback at the end on this Student Mentor

| Number of students enrolled in the institution | Number of fulltime teachers | Mentor : Mentee Ratio |
|--|-----------------------------|-----------------------|
| 5430 | 319 | 18 |

2.4 - Teacher Profile and Quality

2.4.1 – Number of full time teachers appointed during the year

| No. of sanctioned positions | No. of filled positions | Vacant positions | Positions filled during the current year | No. of faculty with Ph.D |
|-----------------------------|-------------------------|------------------|--|--------------------------|
| 309 | 319 | 2 | 6 | 144 |

2.4.2 - Honours and recognition received by teachers (received awards, recognition, fellowships at State, National,

| Year of Award | Name of full time teachers receiving awards from state level, national level, international level | Designation | Name of the award, fellowship, received from Government or recognized bodies |
|---------------|---|------------------------|---|
| 2019 | Dr. B. Parvathavarthini | Dean | Deep Learning - Part 1(Reward:Elite, Gold Medal) |
| 2019 | Dr. G. Mariakalavathy | Professor | The Joy Of Computing Using Pyt hon(Reward:Elite, Silver Medal) |
| 2019 | Dr. G. Murugesan | Professor | Accreditation And Outcome Based Learn ing(Reward:Elite, Silver Medal) |
| 2019 | Dr.Shirley Selvan | Associate Professor | Lecture Notes On Data Engineering And Communications Technologies, Emerging Trends In Computing And Expert Technology.Survey Of The Various Techniques Used For Smoke Detection Using Image Processing: A Survey, Pages 64-69 |
| 2019 | Dr. G. Murugesan | Professor | Nptel Discipline Star |
| 2019 | Dr.M.P.Raja Kumar | Associate Professor | Operating Systems Fundamentals(Reward :Elite) |
| 2019 | Dr.V.Rajinikanth | Professor | A Patent On Disease Diagnosis System Based On Electromyography |
| 2019 | Dr.V.Vijayan | Professor | Received A Grant Of Rs. 7,000 From Ieee To Conduct Techincal Events |
| 2019 | Dr. S. M. Mullaikodi | Associate Professor | Best Researcher Award 2018 |
| 2019 | Dr. G. Baskar | Associate Professor | Chhatra Vishwakarma Award - MentorAicte, New Delhi |
| | <u>View</u> | File | |

2.5.1 – Number of days from the date of semester-end/ year- end examination till the declaration of results during the year

| Programme Name | Programme Code | Semester/ year | Last date of the last semester-end/ year- end examination | Date of declaration of results of semesterend/ year- end examination |
|----------------|----------------|------------------|---|--|
| BE | 103 | 1/1 | 21/12/2019 | 29/01/2020 |
| BE | 103 | 2/1 | 20/03/2020 | 15/08/2020 |
| BE | 103 | 3/2 | 20/11/2019 | 29/01/2020 |
| BE | 103 | 4/2 | 20/03/2020 | 15/08/2020 |
| BE | 103 | 5/3 | 21/11/2019 | 29/01/2020 |
| BE | 103 | 6/3 | 20/03/2020 | 15/08/2020 |
| BE | 103 | 7/4 | 04/11/2019 | 29/01/2020 |
| BE | 103 | 8/4 | 20/03/2020 | 21/11/2020 |
| BE | 104 | 1/1 | 21/12/2019 | 29/01/2020 |
| BE | 104 | 2/1 | 20/03/2020 | 15/08/2020 |
| | | <u>View File</u> | | |

2.5.2 – Reforms initiated on Continuous Internal Evaluation(CIE) system at the institutional level (250 words)

The college has an exclusive Examination Cell headed by a Professor as Controller for overseeing the conduct of all the internal and end-semester examinations. The Controller is assisted by a team consisting of an Assistant Controller, Office Assistants, Computer Programmers, Data Entry Operators and other attenders. The students are kept informed of the evaluation processes, attendance requirements as well as the grading systems for the internal assessments during the department orientation program per semester. An academic schedule is prepared in tandem with the University, which provides information on the examination dates for continuous internal assessment and the same is ecirculated among students and parents. Adaptation of Outcome Based Education Framework: Question bank is submitted to the Examination office in the prescribed format, for the automatic generation of question paper. Question papers are set in line with the requirements of OBE with questions pulled from all levels of Blooms Taxonomy pyramid. The questions are also mapped with the relevant course outcomes stated for the respective courses. On the day of assessment examination, a copy of generated question paper for each subject is verified by the subject teacher to check for any discrepancies. Central evaluation of answer-scripts is conducted after each Continuous Internal Assessment Examination for ensuring consistent and reasonable evaluation. The evaluated answer-scripts are verified by the senior faculty members to ensure transparency and distributed back to the students within two days of examination. An exclusive portal is maintained by the Examination Cell for the purpose of entering and storing the assessment marks obtained by the students. The students can view their marks in the portal using their login credentials.

2.5.3 – Academic calendar prepared and adhered for conduct of Examination and other related matters (250 words)

• The academic calendar is prepared in line with the university Schedule and displayed in the college portal. It includes the opening and closing dates of the classes of each semester, list of holidays, co - curricular activities and schedules of internal end semester exams. • Students are well informed about time table for internal assessment examination and the schedule for portal entry. • Lesson plans are prepared based on academic calendar by the faculty

members. The detailed lesson plan confirming to the syllabus is Prepared by each faculty before the start of the semester. • The lesson plan comprises of content, learning aids and methodology and course outcomes. It is duly reviewed and approved by the one of the senior faculties in the department and corrective actions are suggested by the head of the department whenever required. The lesson plan generally highlights the content and total lecture hours required for the completion of subject syllabus. It is covered within the dates mentioned in the lesson plan and is monitored by the HOD as well. • Details of co-curricular activities such as industrial visits, guest lectures, value added courses, placement training, workshops, cultural, intramural sports are planned by the Department and the schedule for the same is displayed in each department notice board.

2.6 - Student Performance and Learning Outcomes

2.6.1 – Program outcomes, program specific outcomes and course outcomes for all programs offered by the institution are stated and displayed in website of the institution (to provide the weblink)

https://stjosephs.ac.in/NAAC/2.6.1.xlsx

2.6.2 - Pass percentage of students

| Programme Code | Programme Name | Programme Specialization | Number of students appeared in the final year examination | Number of students passed in final year examination | Pass Percentage |
|-------------------|-------------------|---|---|--|-----------------|
| 214 | BTech | Biotechnol ogy | 57 | 52 | 91.22 |
| 205 | BTech | Information Technology | 182 | 129 | 70.87 |
| 203 | BTech | Chemical Engineering | 68 | 54 | 79.41 |
| 114 | BE | Mechanical Engineering | 225 | 225 129 | |
| 112 | BE | Instrument ation and Control Engineering | 58 | 41 | 70.68 |
| 107 | BE | Electronics and Instrume ntation Engineering | 179 | 111 | 62.01 |
| 106 | BE | Electronics and Communic ation Engineering | 189 | 136 | 71.9 |
| 105 | BE | Electrical and Electronics Engineering | 190 | 126 | 66.32 |
| 104 | BE | Computer Science and | 192 | 130 | 67.71 |

| | | Engineering | | | |
|------------------|----|----------------------|----|----|-------|
| 103 | BE | Civil Engineering | 62 | 34 | 54.83 |
| <u>View File</u> | | | | | |

2.7 - Student Satisfaction Survey

2.7.1 – Student Satisfaction Survey (SSS) on overall institutional performance (Institution may design the questionnaire) (results and details be provided as weblink)

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

CRITERION III - RESEARCH, INNOVATIONS AND EXTENSION

3.1 - Resource Mobilization for Research

3.1.1 – Research funds sanctioned and received from various agencies, industry and other organisations

| Nature of the Project | Duration | Name of the funding agency | Total grant sanctioned | Amount received during the year |
|--|----------|---|------------------------|---------------------------------|
| Students Research Projects (Other than compulsory by the University) | 365 | Tamil Nadu State Council for Science and Technology | 7500 | 7500 |
| Students Research Projects (Other than compulsory by the University) | 365 | Tamil Nadu State Council for Science and Technology | 7500 | 7500 |
| Industry sponsored Projects | 365 | Texas Instruments Inc. jointly AICTE, DST New Delhi, IIM, Bangalore | 130000 | 130000 |
| Major Projects | 730 | MODROB'S - AICTE, New Delhi | 1200000 | 1200000 |
| Major Projects | 730 | Government of Tamil Nadu (UBA) | 500000 | 50000 |
| Major Projects | 730 | Department of Science and Technology, New Delhi | 2930600 | 1860408 |
| Students Research Projects (Other than compulsory by the University) | 365 | Tamil Nadu State Council for Science and Technology | 7500 | 7500 |
| Students Research Projects (Other | 365 | Tamil Nadu State Council for Science and | 7500 | 7500 |

| an compulsory by the University) | | Technology | | |
|----------------------------------|--|------------|--|--|
| <u>View File</u> | | | | |

3.2 - Innovation Ecosystem

3.2.1 – Workshops/Seminars Conducted on Intellectual Property Rights (IPR) and Industry-Academia Innovative practices during the year

| Title of workshop/seminar | Name of the Dept. | Date |
|---|--|------------|
| FDP on Mass Transfer Operations. | Chemical Engineering (Anna University, Chennai) | 17/06/2019 |
| International conference on technological advancements in Materials, Design, Manufacturing and Energy Sectors (IC-2017). | Mechanical Engineering (AICTE, New Delhi) | 20/02/2020 |
| The global challenge of desalination with membrane. | Chemical Engineering (AICTE, New Delhi) | 25/11/2019 |
| Prospects and challenges in Biofuels and Bioenergy. | Department of Biotechnology (AICTE, New Delhi) | 11/11/2019 |
| R Programming | Information Technology (MHRD, New Delhi) | 09/11/2019 |
| Arduino | Information Technology (MHRD, New Delhi) | 08/02/2020 |
| C/C | Information Technology (MHRD, New Delhi) | 29/02/2020 |
| Two Days Workshop on Power Management and Stability Solution of the Microgrids | Electrical and Electronics Engineering (CSIR, New Delhi) | 06/06/2019 |
| Short term Training Programme on Indian Electricity Rules and Code of Practices | Electrical and Electronics Engineering (NITTR, Kolkata) | 16/12/2019 |
| Workshop on Legal awareness for womens. | MBA Department (National Commission for Womens, New Delhi) | 04/03/2020 |
| Efficiency Enhancement through green innovation in manufacturing | Mechanical Engineering (DST-SERB Seminar Grant) | 18/12/2019 |
| Role of smart in aerospace and engineering applications | Mechanical Engineering (DST-SERB Seminar Grant) | 16/12/2019 |
| Smart Manufacturing - Opportunities and Challenges. | Mechanical Engineering (AICTE - STTP, New Delhi) | 13/07/2020 |

Effective research Chemical Engineering 27/07/2020
environment and industrial collaboration in Engineering Education.

3.2.2 - Awards for Innovation won by Institution/Teachers/Research scholars/Students during the year

| Title of the innovation | Name of Awardee | Awarding Agency | Date of award | Category | |
|---|---|---|---------------|---|--|
| DRIVELERT - Real Time Driver Distraction And Drowsiness Detection | Ms. Praveena K, Ms. Hazel Bianca P Ms. Karvizhi G(CSE) | National Level Hackathon Venue: SSN College of Engineering | 14/09/2019 | DRIVELERT - Real Time Driver Distraction And Drowsiness Detection | |
| "Mark Me" - the most intelligent attendance system | Mr. Haniel Edward Jacob, Mr.Ajay Kumar S N Mr. Ashwin Kumar U (CSE) | National Level Hackathon Venue: SRM Institute of Science and Technology | 01/09/2019 | "Mark Me" - the most intelligent attendance system | |
| Contribution in the field of Biotechnology | Dr. G. Baskar | The Biotech Research Society, India | 24/11/2019 | Contribution in the field of Biotechnology | |
| Contribution in the field of Biotechnology | Dr. G. Baskar | AICTE, New Delhi | 18/12/2019 | Contribution in the field of Biotechnology | |
| | <u>View File</u> | | | | |

3.2.3 - No. of Incubation centre created, start-ups incubated on campus during the year

| Incubation Center | Name | Sponsered By | Name of the Start-up | Nature of Start- up | Date of Commencement | | |
|----------------------|--|--------------|----------------------------------|-------------------------------------|----------------------|--|--|
| Start-up | -up Department St.Josephs of Biotechno College of logy Engineering | | Mushroom Cultivation Unit. | Mushroom cultivation training | 04/01/2019 | | |
| No file uploaded. | | | | | | | |

3.3 - Research Publications and Awards

3.3.1 – Incentive to the teachers who receive recognition/awards

| State | National | International | |
|-------|----------|---------------|--|
| 0 | 0 | 0 | |

3.3.2 – Ph. Ds awarded during the year (applicable for PG College, Research Center)

| Name of the Department | Number of PhD's Awarded |
|--|-------------------------|
| Computer Science and Engineering | 5 |
| Biotechnology | 1 |
| Electrical and Electronics Engineering | 3 |
| Electronics and Communication Engineering | 2 |
| Mechanical Engineering | 2 |
| Chemical Engineering | 1 |

| MBA | 6 |
|-----|---|
|-----|---|

3.3.3 - Research Publications in the Journals notified on UGC website during the year

| Туре | Department | Number of Publication | Average Impact Factor (if any) | | | | |
|------------------|---|-----------------------|--------------------------------|--|--|--|--|
| National | Computer Science and Engineering | 1 | 0 | | | | |
| International | Biotechnology | 16 | 4.8 | | | | |
| International | Computer Science and Engineering | 18 | 1.2 | | | | |
| International | Electronics and Instrumentation Engineering | 14 | 1.8 | | | | |
| International | Electronics and Communication Engineering | 11 | 2.1 | | | | |
| International | Electrical and Electronics Engineering | 3 | 0.7 | | | | |
| International | Mechanical Engineering | 7 | 1.4 | | | | |
| International | Physics and Chemistry | 13 | 2.0 | | | | |
| International | Mathematics | 1 | 0.4 | | | | |
| International | Chemical | 1 | 0.7 | | | | |
| <u>View File</u> | | | | | | | |

3.3.4 – Books and Chapters in edited Volumes / Books published, and papers in National/International Conference Proceedings per Teacher during the year

| Department | Number of Publication | | | | |
|--|-----------------------|--|--|--|--|
| Electronics and Instrumentation Engineering | 22 | | | | |
| MBA | 11 | | | | |
| Information Technology | 12 | | | | |
| Chemical | 2 | | | | |
| Civil | 4 | | | | |
| Mechanical Engineering | 12 | | | | |
| Electrical and Electronics Engineering | 12 | | | | |
| Electronics and Communication Engineering | 13 | | | | |
| Computer Science and Engineering | 20 | | | | |
| Biotechnology | 11 | | | | |
| <u>View File</u> | | | | | |

3.3.5 – Bibliometrics of the publications during the last Academic year based on average citation index in Scopus/Web of Science or PubMed/Indian Citation Index

| Title of the Paper | Name of Author | Title of journal | Year of publication | Citation Index | Institutional affiliation as mentioned in the publication | Number of citations excluding self citation |
|--|--------------------|---|---------------------|----------------|---|---|
| Morpholo gical segm entation analysis and textur e-based support vector machines c lassificat ion on mice liver fibrosis m icroscopic images | V. Rajin ikanth | Current Bioinforma tics | 2019 | 2.068 | St. Josephs College of Engineerin g | 27 |
| Social-G roup-Optim ization based tumor evaluation tool for clinical brain MRI of Flair/d iffusion- weighted modality | V. Rajin ikanth | Biocyber netics and Biomedical Engineerin g | 2019 | 2.537 | St. Josephs College of Engineerin g | 22 |
| A Hybrid Framework to Evaluate Breast Abn ormality Using Infrared Thermal Images | V. Rajin ikanth | IEEE Consumer E lectronics Magazine | 2019 | 4.01 | St. Josephs College of Engineerin g | 21 |
| Classifi cation of mice hepatic granuloma microscopi c images based on a deep convo lutional neural network | V. Rajin ikanth | Applied Soft Computing Journal | 2019 | 5.472 | St. Josephs College of Engineerin g | 19 |
| Removal of | D. Vasudevan | Internat ional | 2019 | 5.162 | St. Josephs | 18 |

| malachite green from aqueous solutions using a modified chitosan composite | | Journal of Biological Macromolec ules | | | College of Engineerin g | |
|---|--------------|--|------|-------|-------------------------------------|----|
| Bioethanol production from palm wood using Trichoderm a reesei and Kluver omyces marxianus | G. Baskar | Bioresou rce Technology | 2019 | 7.538 | St. Josephs College of Engineerin g | 18 |
| Process optimizati on and kinetic analysis of malic acid production from crude glycerol using Aspe rgillus niger | G. Baskar | Bioresou rce Technology | 2019 | 7.538 | St. Josephs College of Engineerin g | 14 |
| Task scheduling in heterog eneous cloud envi ronment using mean grey wolf optimizati on algorithm | Natesan G | ICT Express | 2019 | 0 | St. Josephs College of Engineerin g | 13 |
| Biodiesel production from Calop hyllum inophyllum oil using zinc doped calcium oxide (Plaster of Paris) nanocataly st | Baskar G | Bioresou rce Technology | 2019 | 7.538 | St. Josephs College of Engineerin g | 13 |

| | Mostar | Clement | Internat | 2019 | 1.747 | St. | 12 | |
|-----|------------------|---------|------------|------|-------|------------|----|--|
| ind | dices of | J | ional | | | Josephs | | |
| car | bon nan | | Journal of | | | College of | | |
| ost | tructure | | Quantum | | | Engineerin | | |
| s a | and circ | | Chemistry | | | g | | |
| um | scribed | | | | | | | |
| | donut | | | | | | | |
| be | nzenoid | | | | | | | |
| s | ystems | | | | | | | |
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3.3.6 – h-Index of the Institutional Publications during the year. (based on Scopus/ Web of science)

| Title of the Paper | Name of Author | Title of journal | Year of publication | h-index | Number of citations excluding self citation | Institutional affiliation as mentioned in the publication |
|---|--------------------|---|---------------------|---------|---|---|
| Mostar indices of carbon nan ostructure s and circ umscribed donut benzenoid systems | J. Clement | Internat ional Journal of Quantum Chemistry | 2019 | 98 | 12 | St. Josephs College of Engineerin g |
| Biodiesel production from Calop hyllum inophyllum oil using zinc doped calcium oxide (Plaster of Paris) nanocataly st | G. Baskar | Bioresou rce Technology | 2019 | 273 | 13 | St. Josephs College of Engineerin g |
| Task scheduling in heterog eneous cloud envi ronment using mean grey wolf optimizati on algorithm | Chokkali ngam A | ICT Express | 2019 | 15 | 13 | St. Josephs College of Engineerin g |
| Process optimizati on and kinetic analysis of malic | G. Baskar | Bioresou rce Technology | 2019 | 273 | 14 | St. Josephs College of Engineerin g |

| acid production from crude glycerol using Aspe rgillus niger | | | | | | |
|---|--------------------|---|------|-----|----|---|
| Bioethanol production from palm wood using Trichoderm a reesei and Kluver omyces marxianus | G. Baskar | Bioresou rce Technology | 2019 | 273 | 18 | St. Josephs College of Engineerin g |
| Removal of malachite green from aqueous solutions using a modified chitosan composite | D. Vasudevan | Internat ional Journal of Biological Macromolec ules | 2019 | 114 | 18 | St. Josephs College of Engineerin g |
| Classifi cation of mice hepatic granuloma microscopi c images based on a deep convo lutional neural network | V. Rajin ikanth | Applied Soft Computing Journal | 2019 | 124 | 19 | St. Josephs College of Engineerin g |
| A Hybrid Framework to Evaluate Breast Abn ormality Using Infrared Thermal Images | V. Rajin ikanth | IEEE Consumer E lectronics Magazine | 2019 | 25 | 21 | St. Josephs College of Engineerin g |
| Social-G roup-Optim ization based tumor evaluation tool for | V. Rajin ikanth | Biocyber netics and Biomedical Engineerin g | 2019 | 22 | 22 | St. Josephs College of Engineerin g |

| clinical brain MRI of Flair/d iffusion- weighted modality | | | | | | | | |
|--|--------------------|-------------------------------|------|----|----|---|--|--|
| Morpholo gical segm entation analysis and textur e-based support vector machines c lassificat ion on mice liver fibrosis m icroscopic images | V. Rajin ikanth | Current Bioinforma tics | 2019 | 26 | 27 | St. Josephs College of Engineerin g | | |
| <u>View File</u> | | | | | | | | |

3.3.7 – Faculty participation in Seminars/Conferences and Symposia during the year :

| Number of Faculty | International | National | State | Local | |
|---------------------------------|---------------|----------|-------|-------|--|
| Attended/Semi nars/Workshops | 4 | 420 | 45 | 11 | |
| Presented papers | 14 | 31 | 3 | Nill | |
| Resource persons | Nill | 2 | 14 | Nill | |
| <u>View File</u> | | | | | |

3.4 - Extension Activities

3.4.1 – Number of extension and outreach programmes conducted in collaboration with industry, community and Non- Government Organisations through NSS/NCC/Red cross/Youth Red Cross (YRC) etc., during the year

| Title of the activities | Organising unit/agency/ collaborating agency | Number of teachers participated in such activities | Number of students participated in such activities | | | |
|-------------------------|---|--|--|--|--|--|
| NGO | CP Children Home Visit | 26 | 455 | | | |
| NGO | Old Age home Visit | 42 | 735 | | | |
| NGO | Orphanage Visit | 210 | 3252 | | | |
| N S S Annual Camp | NSS Unit 1 2/ Anna University | 3 | 100 | | | |
| | No file uploaded. | | | | | |

3.4.2 – Awards and recognition received for extension activities from Government and other recognized bodies during the year

| Name of the activity | Award/Recognition | Awarding Bodies | Number of students Benefited |
|----------------------|-------------------|-----------------|---------------------------------|
| | | | |

| Dengue Fever | no | - | 50 |
|---------------------------------------|---------|-----------|----|
| Awareness Programme at Tsunami Kuppam | | | |
| | No file | uploaded. | |

3.4.3 – Students participating in extension activities with Government Organisations, Non-Government Organisations and programmes such as Swachh Bharat, Aids Awareness, Gender Issue, etc. during the year

| Name of the scheme | Organising unit/Agen cy/collaborating agency | Name of the activity | Number of teachers participated in such activites | Number of students participated in such activites | |
|-------------------------|--|--------------------------------------|---|---|--|
| Unnat Bharat Abhiyan | MHRD | PLASTIC-FREE- VILLAGE CAMPAIGN | 8 | 30 | |
| No file uploaded. | | | | | |

3.5 - Collaborations

3.5.1 – Number of Collaborative activities for research, faculty exchange, student exchange during the year

| Nature of activity | Participant | Source of financial support | Duration |
|--------------------|---|-----------------------------|----------|
| Research | U Rajendra Acharya, Steven Lawrence Fernandes, Joel En WeiKoh, Edward J Ciaccio, Mohd Kamil Mohd Fabell, U John Tanik, V Rajinikanth, Chai Hong Yeong | No Financial Funding | 365 |
| Research | A Bakiya, K Kamalanand, V Rajinikanth, Ramesh Sunder Nayak, Seifedine Kadry | No Financial Funding | 365 |
| Research | KB Sudeepa, Ganesh Aithal, V Rajinikanth, Suresh Chandra Satapathy | No Financial Funding | 365 |
| Research | Venkatesan Rajinikanth, Alex Noel Joseph Raj, Krishnan Palani Thanaraj, Ganesh R Naik | No Financial Funding | 365 |
| Research | Usharani Thirunavukkarasu, Snekhalatha Umapathy, Palani Thanaraj Krishnan, Kumar Janardanan | No Financial Funding | 365 |
| Research | "C. Heltin Genitha, M. Indhumathi, S. Shanmugapriya, S. | No Financial Funding | 365 |

| Dr. G. Sreekumar | No Financial Funding | 41 |
|---|--|--|
| | | |
| Abhir Bhandary, G nanth Prabhu, V Rajinikanth, K alani Thanaraj, Suresh Chandra tapathy, David E obbins, Charles Shasky, Yu-Dong ang, João Manuel S Tavares, N Sri Madhava Raja | No Financial Funding | 365 |
| Hong Lin, V. Rajinikanth | No Financial Funding | 365 |
| Steven Lawrence Fernandes, Venkatesan | No Financial Funding | 365 |
| 5 | ang, João Manuel Tavares, N Sri Madhava Raja Hong Lin, V. Rajinikanth Steven Lawrence Fernandes, | Ang, João Manuel Tavares, N Sri Madhava Raja Hong Lin, V. Rajinikanth Steven Lawrence Fernandes, Venkatesan Rajinikanth, |

3.5.2 – Linkages with institutions/industries for internship, on-the- job training, project work, sharing of research facilities etc. during the year

| Nature of linkage | Title of the linkage | Name of the partnering institution/ industry /research lab with contact details | Duration From | Duration To | Participant |
|------------------------|-------------------------|---|---------------|-------------|-------------|
| Herbal technology | Internship | Avanz Bio Pvt. Ltd. 12 MES Road, East Ta mbaram, chenn ai 59 | 04/01/2020 | 09/01/2020 | 1 |
| Food Biote chnology | Internship | Apex Biotech Research Institute 89, Parthasa rathy | 07/06/2020 | 08/06/2020 | 1 |

| | | st,tiny sector, Ekka tuthangal,Ch ennai 6000032 | | | |
|---|-----------------|---|------------|------------|---|
| Qualitative Quantitative Enzyme Analysis | Internship | Armats Biotech New No. 14 Old No. 18, Mettu Street, Link Road, Maduvi nkarai, Guindy, Chennai. | 03/01/2020 | 10/01/2020 | 1 |
| Nanotechno logy | Internship | Biolim centre for science and technology. 159/385 ,phase 1,Konnur High Road, Ayanavaram, Chennai 23 | 28/12/2019 | 06/01/2020 | 1 |
| Microbiolo gy, immunology and biochemistry | Internship | Indian Institute of Technology Chennai, Tamil Nadu 600036. 044 2257 8000 | 23/12/2019 | 14/01/2020 | 1 |
| Clinical Microbiology | Internship | Dr. ALM PG- IBMS, Univeristy Of Madras, Taramani | 01/06/2020 | 30/06/2020 | 2 |
| Breast cancer research | Internship | Indian Insititute of Science (IISC), Bangalore, Karnataka | 01/05/2020 | 20/07/2020 | 1 |
| Development And Validation Of Indias 1st Indigenous Lamp PCR Based Diagnostic Kit For Map (Mycobacteri um Avium Par | Project work | Biozone Research Technologies Pvt. Ltd, 200 ft Road, Zameen Pallavaram | 05/02/2020 | 10/04/2020 | 1 |

| atuberculosi s) | | | | | | |
|------------------------|------------------|------------------------------|------------|------------|----|--|
| Food Biote chnology | Field Trip | SNJ Breweries Pvt. Ltd | 04/07/2020 | 04/07/2020 | 54 | |
| Healthcare industry | Field Trip | Quantum Medicals Ltd | 25/07/2020 | 25/07/2020 | 57 | |
| | <u>View File</u> | | | | | |

3.5.3 – MoUs signed with institutions of national, international importance, other universities, industries, corporate houses etc. during the year

| Organisation | Date of MoU signed | Purpose/Activities | Number of students/teachers participated under MoUs |
|--|--------------------|--|---|
| Armats Bioteck Training and Research Institute | 01/01/2020 | Student Projects | 3 |
| Shibin Exports | 01/01/2020 | Student Projects Funded project work | 2 |
| MEERA LABORATORTIES | 01/06/2020 | GUEST LECTURE | 220 |
| De Novo Software Solutions | 27/06/2020 | Value Added Courses | 60 |
| Eyeopen Technologies | 01/01/2020 | Value Added Course:Big Data-To understand the basics of Big data, how to treat huge data. Installation of Hadoop and analytics in R | 35 |
| Pristine InfoSolutions Pvt. Ltd | 01/01/2020 | Value Added Course:Cyber Security- To Learn Security Design, Cryptography, Emerging Threats and Network Security. Basics are thought in getting the password of other users. | 31 |
| Averz Technologies | 01/01/2020 | for national level Competitions VAC | 42 |
| Pantech Pro labs | 01/01/2020 | for national level Competitions VAC | 65 |
| VI microsystems | 01/01/2020 | for national level Competitions | 19 |
| Stigmata | 01/01/2020 | for national | 321 |

| Industrial Visit | |
|--------------------|----|
| | |
| VAC Value Added | |
| Course:Machine | |
| learning Techniqu | e |
| using Python-To | |
| understand basics | 3 |
| and package | |
| importing in Pytho | on |
| for solving | |
| problems using | |
| machine learning | |
| techniques | |

View File

CRITERION IV – INFRASTRUCTURE AND LEARNING RESOURCES

4.1 - Physical Facilities

4.1.1 - Budget allocation, excluding salary for infrastructure augmentation during the year

| Budget allocated for infrastructure augmentation | Budget utilized for infrastructure development | |
|--|--|--|
| 21720050 | 20218822 | |

4.1.2 - Details of augmentation in infrastructure facilities during the year

| Facilities Existing or Newly Added | | |
|------------------------------------|---------------|--|
| Classrooms with Wi-Fi OR LAN | Existing | |
| View | <u>/ File</u> | |

4.2 – Library as a Learning Resource

4.2.1 – Library is automated {Integrated Library Management System (ILMS)}

| Name of the ILMS software | Nature of automation (fully or patially) | Version | Year of automation |
|---------------------------|--|---------|--------------------|
| Autolib | Fully | 20.01 | 2020 |

4.2.2 - Library Services

| Library Service Type | Existing | | Newly Added | | Total | |
|-------------------------|------------|--|------------------|--|-------|--------|
| Journals | 125 362597 | | 125 327476 | | 250 | 690073 |
| | | | <u>View File</u> | | | |

4.2.3 – E-content developed by teachers such as: e-PG- Pathshala, CEC (under e-PG- Pathshala CEC (Under Graduate) SWAYAM other MOOCs platform NPTEL/NMEICT/any other Government initiatives & institutional (Learning Management System (LMS) etc

| Name of the Teacher | Name of the Module | Platform on which module is developed | Date of launching e- content |
|---------------------|--|---------------------------------------|---------------------------------|
| Mr M. Arun | NPTEL TRANSLATOR Course Name : Introduction to Fluid Mechanics (112105269) | SWAYAM (NPTEL) | 26/05/2020 |
| Mr. Suresh K | OOAD-CS8592 - Uml package diagram | https://youtu.be/ gCuI41J-7GY | 21/02/2020 |
| Dr. Sumathi S | Machine Learning | https://youtu.be/ | 26/03/2020 |

| | - Image Classification with CNN | pLPK3SeXtZQ | |
|---------------------------|---|----------------------------------|------------|
| Mr. Suresh K | IT ESSENTIALS - Information Retrival using PHP and Mysql | https://youtu.be/ Uq0klFouOmE | 03/04/2020 |
| Dr. Esther Hannah M | IT essentials - SMS and Voice calls | https://youtu.be/ S_8V80RdgeU | 04/04/2020 |
| Mrs. Thresa Jeniffer J | IT Essentials - Database Applications | https://youtu.be/ ADtRe_HuMXI | 04/04/2020 |
| Mrs.Anitha S | Introduction to file concept in C Programming | https://youtu.be/ pn9wUJKYU7I | 04/04/2020 |
| Mrs. Deepa R | RANDOM ACCESS FILE IN C PROGRAMMING | https://youtu.be/ XUBtxl2N-mE | 06/04/2020 |
| Mrs. Divya J | It8201- It Essentials - Networking Essentials Part 1 | https://youtu.be/ bZh68JAackY | 07/04/2020 |
| Mrs. Divya J | It8201 -It Essentials - Networking Essentials Part 2 | https://youtu.be/ y7E9xj8aqYk | 07/04/2020 |

4.3 - IT Infrastructure

4.3.1 – Technology Upgradation (overall)

| Туре | Total Co mputers | Computer Lab | Internet | Browsing centers | Computer Centers | Office | Departme nts | Available Bandwidt h (MBPS/ GBPS) | Others |
|--------------|---------------------|-----------------|----------|------------------|---------------------|--------|-----------------|--|--------|
| Existin g | 1340 | 1025 | 0 | 50 | 104 | 36 | 71 | 200 | 54 |
| Added | 274 | 208 | 0 | 0 | 40 | 5 | 21 | 75 | 0 |
| Total | 1614 | 1233 | 0 | 50 | 144 | 41 | 92 | 275 | 54 |

4.3.2 - Bandwidth available of internet connection in the Institution (Leased line)

275 MBPS/ GBPS

4.3.3 – Facility for e-content

| Name of the e-content development facility | Provide the link of the videos and media centre and recording facility |
|---|---|
| Video Media Centre Smart classrooms Smart classrooms | https://stjosephs.ac.in/NAAC/4.3.3%20Fa cility%20for%20e- content%202019_2020.pdf |

4.4 - Maintenance of Campus Infrastructure

4.4.1 – Expenditure incurred on maintenance of physical facilities and academic support facilities, excluding salary component, during the year

| Assigned Budget on academic facilities | Expenditure incurred on maintenance of academic facilities | Assigned budget on physical facilities | Expenditure incurredon maintenance of physical facilites |
|--|--|--|--|
| 27064320 | 24450214 | 27438960 | 26923192 |

4.4.2 – Procedures and policies for maintaining and utilizing physical, academic and support facilities - laboratory, library, sports complex, computers, classrooms etc. (maximum 500 words) (information to be available in institutional Website, provide link)

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 incharges 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 nonteaching 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.

https://stjosephs.ac.in/NAAC/4.4.2 AQAR 2019 2020 Procedures%20and%20policies%20for%20maintaining% 20and%20utilizing.pdf

5.1 - Student Support

5.1.1 – Scholarships and Financial Support

| | Name/Title of the scheme | Name/Title of the scheme | |
|--------------------------------------|-------------------------------|--------------------------|----------|
| Financial Support from institution | Sports Quota | 27 | 3915000 |
| Financial Support from Other Sources | | | |
| a) National | First Graduate Scholarship | 572 | 14300000 |
| b)International | 0 | Nill | 0 |
| | <u>View</u> | 7 File | |

5.1.2 – Number of capability enhancement and development schemes such as Soft skill development, Remedial coaching, Language lab, Bridge courses, Yoga, Meditation, Personal Counselling and Mentoring etc.,

| Name of the capability enhancement scheme | Date of implemetation | Number of students enrolled | Agencies involved |
|--|-----------------------|-----------------------------|---|
| BEC Training | 01/06/2019 | 1266 | Winspire, Aluva Clock Tower Municipal Building, NH 47, Cochine, Strides, 56, Denning Road, South Civil Lines, Jabalpu r-482001 Six phrase, No 93 A, Papanaickenpalayam, Coimbatore - 641037. |
| Yoga and Meditation | 01/06/2019 | 412 | Dr. Hari No.(Old No 118),16th cross Street, Besant Nagar, Chennai 6 00 090 Ph No.044 2446 4387 |
| Communication Language Lab | 01/06/2019 | 1720 | Internal Resources |
| Communication skill Enhancement | 20/09/2019 | 1075 | Winspire,Strides |
| Placement Orientation Program- II with soft skill phase | 03/06/2020 | 968 | Smart Traing Resources |
| All Engineering, Science and Humanities Departments | 01/06/2019 | 1092 | Internal Resources |
| | View | File | |

5.1.3 – Students benefited by guidance for competitive examinations and career counselling offered by the institution during the year

| Year Name of the Number of Number of Number of N |
|--|
|--|

| | | scheme | benefited students for competitive examination | benefited students by career counseling activities | students who have passedin the comp. exam | studentsp placed |
|--|------------------|--|---|--|---|------------------|
| | 2019 | BEC | 1266 | Nill | 1089 | Nill |
| | 2019 | GATE/GRE/G MATE | 19 | Nill | 44 | Nill |
| | 2019 | Placement Orientation (Final Year) | Nill | 968 | Nill | 902 |
| | 2019 | Product based traini ng(Final year) | Nill | 300 | Nill | 285 |
| | 2019 | Aptitude t raining(seco nd year) | Nill | 1204 | Nill | Nill |
| | 2019 | Advanced C training (Third year) | Nill | 1036 | Nill | Nill |
| | <u>View File</u> | | | | | |

5.1.4 – Institutional mechanism for transparency, timely redressal of student grievances, Prevention of sexual harassment and ragging cases during the year

| Total grievances received | Number of grievances redressed | Avg. number of days for grievance redressal |
|---------------------------|--------------------------------|---|
| 14 | 14 | 12 |

5.2 - Student Progression

5.2.1 – Details of campus placement during the year

| On campus | | | Off campus | | |
|------------------------------|---------------------------------------|---------------------------|------------------------------------|---------------------------------------|---------------------------|
| Nameof organizations visited | Number of students participated | Number of stduents placed | Nameof organizations visited | Number of students participated | Number of stduents placed |
| Infosys | 118 | 40 | Spangles infotech | 2 | 1 |
| <u>View File</u> | | | | | |

5.2.2 – Student progression to higher education in percentage during the year

| Year | Number of students enrolling into higher education | Programme graduated from | Depratment graduated from | Name of institution joined | Name of programme admitted to |
|------|---|-----------------------------|---------------------------|----------------------------------|-------------------------------|
| 2019 | 1 | B.E | EIE | RMIT UNIVERSITY, AUSTRALIA | MS |
| 2019 | 1 | B.E | ECE | UNIVERSITY OF TEXAS | MS |
| 2019 | 1 | B.E | CSE | CALIFORNIA STATE | MS |

| | | | | UNIVERSITY | |
|------|---|--------|-------------|--|------|
| 2019 | 1 | в.тесн | BIO | UNIVERSITY OF ILLINOIS, CHICAGO | MS |
| 2019 | 1 | B.TECH | СНЕМ | EINDHOVEN UNIVERSITY OF TECHNOLOGY | MS |
| 2019 | 1 | B.E | CIVIL | POLITECNICO DI MILANO'S CAMPUSES | MS |
| 2019 | 1 | B.TECH | IT | IIM RANCHI | MBA |
| 2019 | 1 | B.TECH | MECH | UNIVERSITY OF MELBOURNE | MEng |
| | | View | <u>File</u> | | |

5.2.3 – Students qualifying in state/ national/ international level examinations during the year (eg:NET/SET/SLET/GATE/GMAT/CAT/GRE/TOFEL/Civil Services/State Government Services)

| Items | Number of students selected/ qualifying | | | |
|------------------|---|--|--|--|
| GATE | 6 | | | |
| GMAT | 2 | | | |
| CAT | 3 | | | |
| GRE | 24 | | | |
| TOFEL | 10 | | | |
| Any Other | 97 | | | |
| <u>View File</u> | | | | |

5.2.4 - Sports and cultural activities / competitions organised at the institution level during the year

| <u>'</u> | <u> </u> | |
|--|----------|------------------------|
| Activity | Level | Number of Participants |
| Inter College Symposium - FENESTRA (MBA) 97 | National | 446 |
| Inter College Symposium - ETERNITE(IT) 97 | National | 347 |
| College Day - II, III IV Year 97 | Intra | 4085 |
| Maths Club 97 | Intra | 389 |
| Intra department Symposium - IT 97 | Intra | 571 |
| 65th All India Badminton Championship 97 | National | 200 |
| 11th St. Joseph's All India Ball Badminton Tournament 97 | National | 200 |
| St. Joseph's National Level Silambam Tournament 97 | National | 160 |

| Tamil Mandram 97 | Intra | 321 | | |
|--|-------|------|--|--|
| Cultural Competitions - II, III IV Year 97 | Intra | 4085 | | |
| <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 national/international level (award for a team event should be counted as one)

| Year | Name of the award/medal | National/ Internaional | Number of awards for Sports | Number of awards for Cultural | Student ID number | Name of the student |
|------|-------------------------|---------------------------|-----------------------------|-------------------------------------|----------------------|-----------------------|
| 2019 | Third Place | National | 1 | Nill | 31231710 7154 | B.Swarna mala |
| 2019 | Third Place | National | 1 | Nill | 31231910 6065 | B.Jagatha |
| 2019 | 14th Place | National | 1 | Nill | 31231710 7154 | B.Swarna mala |
| 2019 | World Record | Internat ional | Nill | 1 | 31231810 7027 | Jashwanth S |
| 2019 | World Record | Internat ional | Nill | 1 | 31231810 7112 | Yuvaraj V |
| 2019 | I Place | National | Nill | 1 | 31231711 4060 | Guruvarma K |
| 2019 | I Place | National | Nill | 1 | 31231910 4016 | Anjana V |
| 2019 | I Place | National | Nill | 1 | 31231910 4076 | Kiruthika S |
| 2019 | Silver medal | Internat ional | 1 | Nill | 31231610 3035 | Prithivi Raj C S B |
| 2019 | Silver medal | Internat ional | 1 | Nill | 31231821 4050 | Siva Santhosh S |
| | | | <u>View File</u> | | | |

5.3.2 – Activity of Student Council & representation of students on academic & administrative bodies/committees of the institution (maximum 500 words)

The institution has avenues for active participation of students on academic and administrative committees. The senior students involve themselves in the teams which give orientation to the new comers every year. Participating such activities nurtures leadership skills and team spirit in the students. The Institution conducts department wise students meeting beginning of every semester where 6 students team is participated and give their feedback on their academic need. Students enthusiastically take part in the activities of National Service Scheme (NSS) and Youth Red Cross (YRC) in the college. All the students visit homes for destitute children, old age home etc., run by Non-Government Organizations once in a semester in turn. Participation of students in these activities inculcates the social responsibility in the minds of students. The institution caters to specific needs of the students to equip for a career of their choice through Civil Service Academy, Defence academy and

Entrepreneurship Development Cell which are functioning under the guidance of dedicated faculty members. The Institution has various clubs such as Tamil Mandram, English Club, Eco-Soc Club and Mathematics Club in which students take active part to develop their soft skills. Participation of students in the activities of CTS Club, Developer Students Club and Coding Club enhances their technical skills. The Institution has students chapters of the following professional societies which provide avenues for the development of technical skills, updating knowledge, personality development and service to the society: Computer Society of India(CSI), Indian Society for Technical Education (ISTE), IETE, IEEE, IChem, SAEINDIA Collegiate Club, IWS, ISHRAE etc. The student members involved in the societies form working groups to carry out activities such as • Imparting computer training to school children • Developing Engineering models • Construction of racing cars The students also act as coordinators during Inter-Collegiate and Intra-Department symposia.

5.4 – Alumni Engagement

5.4.1 – Whether the institution has registered Alumni Association?

Yes

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 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 at various occasions of the Institute. 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.

5.4.2 - No. of enrolled Alumni:

5.4.3 – Alumni contribution during the year (in Rupees) :

177700

5.4.4 - Meetings/activities organized by Alumni Association :

Alumni meetings are conducted, Webinars are conducted, Career Counselling is done by Alumni

CRITERION VI - GOVERNANCE, LEADERSHIP AND MANAGEMENT

6.1 – Institutional Vision and Leadership

6.1.1 – Mention two practices of decentralization and participative management during the last year (maximum 500 words)

Practice 1. Planning of Academic Activities 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. HODs 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. HODs conduct periodic meetings in the department The collective suggestions given by the faculty, students, corporate and other stakeholders 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 teamwork among the stakeholders. Practice 2 Placement Activities Placements are one among the major achievements of the institutions. The placements cell is headed by Dr.Divan, the cell has coordinators from each department as a member. The "Get Set Go" program designed by the placement cell is one of its kind. The students are given aptitude training from the first semester. The placement coordinators monitor the performance of the students and help them to do better. The performance record of the students is maintained by the coordinators. In the second year the students are trained on the technical aspects like C, C, JAVA. Based on the performance of the students the students are grouped into categories and the coordinators arrange for specialised training. The coordinators along with a panel of interviewers (alumni and selected HR's from industries) arrange for mock interviews and the students are provided with feedback. The performance is continually monitored by the coordinators. A In the final year students undergo Data structures Algorithm, Code fit training and AMCAT Assessment. . Assessment is done at the end to find the gap in skill requirements. If there is a gap the students are asked to repeat the learning process and make them competitive by additional training. Hence all the activities planned by the Training and placement cell aims at enhancing the students overall performance for their desired career goals. The implementation of training has resulted in the increase of the placements by 40 in the year 2019-2020.

6.1.2 – Does the institution have a Management Information System (MIS)?

Partial

6.2 – Strategy Development and Deployment

6.2.1 – Quality improvement strategies adopted by the institution for each of the following (with in 100 words each):

| 6.2.1 – Quality improvement strategies adopted by the ins | , I | | |
|---|---|--|--|
| Strategy Type | Details | | |
| Admission of Students | The admission to UG programmes in our college is by Single Window Admission System through Directorate of Technical Education, and Consortium (Consortium of Self Financing Professional, Arts and Science Colleges in Tamilnadu) and for PG courses by Anna University through Tamil Nadu Common Entrance Test and Consortium. Student enrolment for the last five years is 99.85 against sanctioned intake. | | |
| Industry Interaction / Collaboration | Industry institute is of prime | | |
| | importance at St Josephs College of Engineering. The teaching learning process is further enhanced by the collaborative efforts taken by the institution. Value added courses are designed for the students in taking into consideration the opinion of the industry experts. The number of value added courses for the year 2018-2019 are 74.To understand the corporate working en vironment , the institution has signed Mou's with world class organizations like BSNL, Pantech, PRO Labs, CDCE, NSIC, ICTACT, Voltech Engineering, Oracle Academy, Butterfly Gandhimathi Appliances, Salesforces, AWS Educate, to name a few. The wonderful rapport and healthy relationship between the institution and companies like CTS, Wipro, Zoho, Solitron, etc contribute a lot to the right exposure and helps students to be aware of the latest technologies. Students are offered internship programs by companies like cognizant, Sullivian, KL Laboratories, Murugappa Group, GE Digital, Econ system, ZOHO have offered internships to the students. The total number of internships offered are 112. Industrial visits are organised every semester to make students understand theory in practice and expose students to the corporate work environment. Activities are also organised by the students chapter of Google Club, | | |
| | Cognizant student club, coding club. | | |
| Human Resource Management | Recruitment Process: HODs forward the staff requirement details to the Principal, taking into consideration additional work load or staff leaving the institution. After consolidation of | | |

the requirements from various departments, the Principal with the concurrence of Chairman arranges for publishing advertisements in the newspapers, specifying the qualification, experience and other skills required for the post concerned. The applications received from the candidates are scrutinized by the Heads of Departments. The applicants who fulfill the requirements with regard to qualification and experience are called for interview. The selection process consists of four stages (i) a screening test (ii) test for competency in teaching (iii) personal interview on technical and general aspects by a panel of experts drawn from related disciplines of Engineering (iv) final interview by the Chairman and Principal. Every candidate selected for appointment for a faculty position shall be on probation on such post for the period of two years, on the satisfactory completion of the prescribed period, he / she shall be automatically eligible for the confirmed post. The staff members are allowed to get relieved from the institution at the end of every academic year by submitting the resignation letter three months in advance. Promotion: the Institution follows a transparent promotion policy fixed by the management in accordance to the norms laid by AICTE. Performance Appraisal: The institution has a systematic appraisal process in place. An online feedback system is followed where the students apprise faculty on various criteria for their performance. The faculty are also apprised by the HOD, peer group and self appraisal.

Library, ICT and Physical Infrastructure / Instrumentation

Library as a Learning Resource
Computerized, fully air-conditioned
central library houses 47,454 volumes
of books and 144 national Journals
apart from the 712 online journals from
IEEE-IEL and Science direct and has a
huge repository of NPTEL videos. The
college also has access to MALIBNETand
DELNET Library Networks to benefit
staff and students. A book bank
offering subject text books for every
student throughout their period of
study is functioning in the college.
ICT Infrastructure The college is
equipped with 1340 high configuration

internet connected computers. Servers with high end configuration housing latest softwares are deployed in all computer labs. A dedicated lease line of 215 Mbps bandwidth with Wi-Fi networking is being offered. E-content development center and ICT enabled seminar halls available in the college help the faculty to prepare and deliver ICT enabled lectures. Physical Facilities The institute has a sprawling campus spread over 28.16 acres with modern buildings, technologyenabled classrooms, well equipped laboratories, well stocked libraries, spacious hostels for the students, guest rooms, seminar halls, tutorial halls, conference halls, examination cell, restrooms, canteens, ATMs, intercom facilities for intra communication, gymnasiums with modern tools and indoor auditorium a spacious play field, courts for outdoor and indoor games. Guaranteed, uninterrupted power supply with sufficient number of generator sets of total installed capacity of 1450 kWA, a Reverse osmosis water treatment plant and Medical facility is available in the campus

Research and Development

St. Joseph's College of Engineering, ever since its inception in the year 1994, has taken huge strides towards differentiating itself by focusing on pursuit of Innovation and Research by its faculty and students. Many of our faculties are recognized supervisors to guide the Ph.D research scholars. To prove the RD activities in our college, our faculty members have published many research papers in various National and International Journals and Conferences. Last four years they have published 1320 research papers. The Research Advisory Board was constituted in the year 2012 to strengthen the Research activities of the Institution, consisting of the Chairman, Secretary and Members, from various departments of our college and Scientists from other Govt. Research Centers. The Research Advisory Board monitors the research and development activities, focuses on Submission of project proposals to various funding agencies and recommends for the campus and other infrastructure developments. It also offers a quality research training experience for its students and faculty

| | members in the recent frontiers of Engineering and Technology. Our college has been accredited by the Department of Scientific and Industrial Research (DSIR), Ministry of Science and Technology as a Scientific and Industrial Research Organization (SIRO). We have so far filed 34 patents out of which 24 patents were published, one patent, two copyright and one design was granted till date. |
|----------------------------|---|
| Examination and Evaluation | The students are assessed by continuous assessment through internal assessment examination with the weightage of 20 and the end semester examination with 80 weightage. Overall assessment of learning is made through Unit wise internal assessment examinations and Model examination. Model examination for practical subjects, Quiz, problem solving exercise - cognitive learning Project and model development. Students are provided with feedback for the above assessment of learning in view of improving their performance. The examination cell has an automated question paper generation software and also an automatic result analysis software. |
| Teaching and Learning | Efforts are taken by the institution to make the Teaching Learning Process student centric. Apart from the conventional method of "chalk and Talk" teaching the institution also uses modern methods like smart classes, demo classes and other online tools to deliver the subjects effectively. Experiential learning is imparted to the students through different techniques like practical classes, mini projects, internships, technical symposium, innovative project competitions and so. Self learning is encouraged. Activities organised by different clubs in the institution like the Google club, the coding club, the ED cell, the robotics club, the investors club encourage students to explore and learn new concepts and skills to problem solving |
| Curriculum Development | The institution is affiliated to Anna University and follows the curriculum prescribed by the University. To fill the gap between the curriculum and industry requirements, the institution has designed topics beyond syllabus. |

Value added courses are also given to the students. The topics and the courses are decided in consultation with a committee comprising the HOD, senior faculty, external subject experts, industry experts and alumni

6.2.2 – Implementation of e-governance in areas of operations:

| E-governace area | Details |
|--------------------------|---|
| Planning and Development | An Admin portal is a secure site where you can easily share and maintain a centralized information management within our institution. The ultimate goal of this portal is for ease communication, collaboration and document sharing for people within the college, so that the staff and students can access their needs at the right time through their student and staff portal login access. A staff portal is a secure site where you can easily share and access information within our institution, and keep all your staff on the same page. The ultimate goal of this portal is for ease communication, collaboration and document sharing for people within the college, so that the students can access their needs at right time through their student portal login access. |
| Administration | An admin portal is a secure site where for every semester the subjects are enabled for both staff and students so that communication takes place effectively. Admn can update the regular attendance details the continuous assessment marks which can be viewed and communicated to the parents through the portal. The admn communicates through SMS facility email id with parents, students and faculty. Biometrics software: The daily login and logout details are registered and verified by the biometric software. It also calculates the details regarding the leave, absent and loss of pay of the faculty and staff members. |
| Finance and Accounts | InooeOps is the software used by the institution for the calculation of the salary of the teaching and non teaching staff. It includes all the details regarding the basic pay Dearness allowance, the house rent allowances, the gross pay details along with the PF, income tax, loss of pay and other deductions. |

| Student Admission and Support | A student portal is a secure site where you can easily access information within our institution, and keep all the students on the same page. The ultimate goal of this portal is for ease communication, collaboration and document sharing for people within the college, so that the students can access their needs at the right time through their student portal login access. Self Learning Portals like Skill Rack, Co Cubes, My slate is also made available to students for training and development |
|-------------------------------|--|
| Examination | Automated Result Analysis: This software provides students and staff an effective approach to keep track of college results by maintaining it through websites. It helps the staff members to view and download various result analysis formats. It also helps students and parents to check their ward results and progress through online. Automated Question Paper Generation: This software is used to generate question paper for the internal continuous assessments examinations using the question bank submitted by the respective subject faculty. |

6.3 - Faculty Empowerment Strategies

6.3.1 – Teachers provided with financial support to attend conferences / workshops and towards membership fee of professional bodies during the year

| Year | Name of Teacher | Name of conference/ workshop attended for which financial support provided | Name of the professional body for which membership fee is provided | Amount of support |
|------|-------------------------|---|--|-------------------|
| 2019 | | | NRSC, Hyderabad | 1500 |
| 2019 | Mr.Ramachandra Reddy | FDP on Artificial Intelligence at NIT, Warangal | Warangal | 1300 |
| 2019 | Ms Jenif D souza | CAD System for Lung Cancer and its Stages Detection Using Image Processing Techniques | International Journal of Innovative Technology and Exploring Engineering | 5000 |
| 2019 | Dr.M.Anuradha | Load Balanced | International | 5000 |

| | | Cross Layer Based Multipath Routing in Mobile Adhoc Network | Journal of Innovative Technology and Exploring Engineering | |
|------|-----------------------|--|--|------|
| 2019 | Dr.G.Murugesan | Single Source Divisible loud subability on Distributed Heterogenous Environment | International Conference on Inventive Computation Technologies -ICICT | 5000 |
| 2019 | Ms.S.Janani | Autonomous Data Hiding in an Encrypted Image using KM- DH Algorithm | International Journal of Innovative Technology and Exploring Engineering | 5000 |
| 2019 | Mr.R.Ranjith | Personality tract Analysis by Graphology Technique Using Machine Learning | International Journal of Innovative Technology and Exploring Engineering | 5000 |
| 2019 | Dr.N.Angel | An Automatic Classification of Dermoscopy Image with Multilayer Perception Using Weka | International Journal of Innovative Technology and Exploring Engineering | 5000 |
| 2019 | Dr.A.Sheryl Oliver | Automated Pollution Detection System using Iot AWS Cloud | International Journal of Innovative Technology and Exploring Engineering | 5000 |
| 2019 | Dr.R.Pugalenthi | Multi-level Thresholding with Fractional- order Darwinion PSO and Tsqllis Function View File | International Journal of Innovative Technology and Exploring Engineering | 5000 |

6.3.2 – Number of professional development / administrative training programmes organized by the College for teaching and non teaching staff during the year

| Year | Title of the professional development programme organised for teaching staff | Title of the administrative training programme organised for non-teaching staff | From date | To Date | Number of participants (Teaching staff) | Number of participants (non-teaching staff) |
|------|--|---|------------|------------|--|---|
| 2019 | FDTP on Problem | Nill | 29/07/2019 | 31/07/2019 | 30 | Nill |

| | Solving Using Python | | | | | |
|------|---|------|------------|------------|-----|------|
| 2019 | Deep Learning | Nill | 24/07/2019 | 25/07/2019 | 20 | Nill |
| 2019 | Workshop on C/C | Nill | 29/02/2020 | 29/02/2020 | 20 | Nill |
| 2019 | Short Term Course on "Big Data Analytics" | Nill | 03/02/2020 | 07/02/2020 | 35 | Nill |
| 2019 | FDP on "Agile Met hodology | Nill | 20/05/2020 | 22/05/2020 | 30 | Nill |
| 2019 | (SERB)-S ponsored 3 days national seminar on Efficiency Enhancemen t through Green Innovation in Manufac turing | Nill | 18/12/2019 | 20/12/2019 | 25 | Nill |
| 2019 | Role of Smart Materials in Aerospace and Engine ering Appl ications | Nill | 16/12/2019 | 17/12/2019 | 20 | Nill |
| 2019 | Internat ional conference on Technol ogical Adv ancements in Materials Design Man ufacturing and Energy Sectors | Nill | 20/02/2020 | 21/02/2020 | 144 | Nill |
| 2019 | FDP on Machine Learning and Artificial Intelligen ce in Automaion | Nill | 21/08/2019 | 23/08/2019 | 21 | Nill |

| 2019 | Understa nding Data Analytics with Real- Life Cases | Nill | 28/05/2020 | 30/05/2020 | 90 | Nill |
|------------------|---|------|------------|------------|----|------|
| <u>View File</u> | | | | | | |

6.3.3 – No. of teachers attending professional development programmes, viz., Orientation Programme, Refresher Course, Short Term Course, Faculty Development Programmes during the year

| Title of the professional development programme | Number of teachers who attended | From Date | To date | Duration |
|---|------------------------------------|------------|------------|----------|
| Three Days Short-term Courses on "Geographic Information Systems" | 2 | 20/06/2019 | 22/06/2019 | 3 |
| Regional Orientation Session on IIC 2.0 and ARIIA 2020 | 1 | 31/07/2019 | 31/07/2019 | 1 |
| Two days National Seminar on "Statistical Methods and Applied Mathematics in Data Science | 3 | 13/09/2019 | 14/09/2019 | 2 |
| Two day Workshop on "Machine Learning Techniques for Building Intelligent Systems" | 4 | 27/09/2019 | 28/09/2019 | 2 |
| One day Faculty Development Program on "Digital Disruption" | 3 | 22/11/2019 | 22/11/2019 | 1 |
| Two days TEQIP-III Sponsored workshop on "Big Data Analytics with Hadoop" | 10 | 10/10/2019 | 11/10/2019 | 2 |
| One Day FDP | 1 | 11/11/2019 | 11/11/2019 | 1 |

| on "Block Chain" | | | | | | |
|--|---|------------|------------|---|--|--|
| One Day Workshop on "Deep Learning using Tensor Flow" | 1 | 11/10/2019 | 11/10/2019 | 1 | | |
| Symposium cum Tech Meet on ICT Trends | 1 | 15/10/2019 | 15/10/2019 | 1 | | |
| Three days Faculty Development Program on Introduction to Big Data Analytics | 2 | 11/11/2019 | 13/11/2019 | 3 | | |
| <u>View File</u> | | | | | | |

6.3.4 – Faculty and Staff recruitment (no. for permanent recruitment):

| Teac | hing | Non-teaching | | |
|---------------------|------|---------------------|---|--|
| Permanent Full Time | | Permanent Full Time | | |
| 12 | 12 | 1 | 1 | |

6.3.5 - Welfare schemes for

| Teaching | Non-teaching | Students |
|---------------------------|---------------------------|---------------------------|
| ? Medical allowances to | ? Medical allowances to | ? Special Privileged |
| meet emergency medical | meet emergency medical | leave for any important |
| expenses of staff and | expenses of non - | domestic functions ? TA / |
| their dependents with | teaching staff and their | DA amount reimbursement |
| medical leave. ? Free | dependents with medical | for Competition winners ? |
| transport and mess | leave ? Educational | On duty to attend |
| facilities to all ? | support to their wards is | symposiums, workshops and |
| Marriage gift for staff | provided ? Vacation for | conferences ? Special |
| and their wards and | the securities with | gifts and Special dinner |
| providing leave. ? House | travelling allowance ? | for Competition Winners |
| warming gift. ? Maternity | Three sets of uniform per | during Achievers day ? |
| leave with full salary. ? | year ? Marriage gift for | Special lunch for First |
| All the non-doctoral | staff and their wards | Orientation organized / |
| faculties are encouraged | with leave. ? House | involved students ? |
| to get enrolled for Ph.D. | warming gift. ? Maternity | Amount 5000/- for Scopus, |
| program in various | leave with full salary. ? | SCI indexed journal |
| Universities. Providing | On campus free medical | publications ? On campus |
| on duty to pursue Ph.D ? | facilities and | free medical facilities |
| Registration fees is paid | physiotherapy ? Employee | and physiotherapy ? Free |
| for attending | Provident Fund and | accommodation and food in |
| conferences, workshops | Pension Schemes ? Special | hostel for sports |
| and FDPs in their field | leave for religion | students ? Waiver of |
| of interest. ? Providing | festivals ? Winter and | tuition fees for sports |
| professional body | summer vacations ? Free | students ? Training for |
| membership fees ? | accommodation in hostel | IAS through St. Joseph's |
| Providing financial | for out station employees | Civil Services Academy ? |
| support to attend and | ? Waiver of tuition fees | Training for Indian Armed |
| present research papers | in the Institution to the | Forces through St. |
| in national level and | wards ? Free transport | Josephs Defense Academy |

international level conferences and for refereed journals. ? Employee Provident Fund and Pension Schemes. ? Special leave for religious festivals. ? Winter and summer vacations. ? Blazers for all teaching staff for comfortable teaching. ? On campus free medical facilities and physiotherapy ? Gifts during teacher's day celebration ? Cafeterias and Stores

and mess facilities ?
Cafeterias and Stores

6.4 - Financial Management and Resource Mobilization

6.4.1 – Institution conducts internal and external financial audits regularly (with in 100 words each)

Internal audit: The institution has a well-defined mechanism to audit the utilization of funds. Our Institution conducts internal financial auditing periodically. The process of internal auditing starts with the budgetary preparation and there is a well defined process for sanction of budget. The monitoring of expenditure against budget is regularly undertaken annually, where all department in-charges and administrative in-charges submit their previous year annual expenditure statement along with next year budget for recurring and non - recurring expenses during the month of January/February to the Principal and it is forwarded to the Chairman. The approved budget is communicated to all the department in-charges and administrative in-charges. Based on this, the monthly budget is prepared by all the department and administrative in-charges. The Chairman monitors and reviews the monthly expenditures of the Institution by conducting budget meetings. The budget meeting takes place last Monday of every month and in this meeting next months budget is presented and previous month expenses and balances are checked. The main purpose of this procedure is to monitor the expenses and increase the operating efficiency. Proper record for all budget expenses is maintained by each department in-charges, administrative in-charges, accounts department, and the Principal office. Further the accounts department audits all the bills and vouchers and maintains the record of all the expenditures incurred. External auditing: Our Institution complies with the statutory auditing norms. At the end of every financial year, the income and expenditure statement is duly audited and authorized by a Chartered Accountant. The Chartered Accountant prepares and submits the auditor's report for the financial year. The report exhibits that the statements are presented fairly in all material respects that our Institution shows a true and fair view in the financial position, results of operations, and cash flows.

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

| Name of the non government funding agencies /individuals | Funds/ Grnats received in Rs. | Purpose |
|--|-------------------------------|---|
| IEEE- EEE | 69000 | For Conducting a National Level Summit on Smart City, Smart Nation, Smart World 2019 |

6.4.3 - Total corpus fund generated

134500

6.5 – Internal Quality Assurance System

6.5.1 – Whether Academic and Administrative Audit (AAA) has been done?

| Audit Type | External | | Inte | rnal |
|----------------|----------|--|--------|-----------------------------|
| | Yes/No | Agency | Yes/No | Authority |
| Academic | Yes | Expert Team from St. Joseph's Institute of Te chnology,Chenna i. | Yes | Internal Audit committee |
| Administrative | Yes | Expert Team from St. Joseph's Institute of Te chnology,Chenna i. | Yes | Internal Audit Committee |

6.5.2 – Activities and support from the Parent – Teacher Association (at least three)

The parent teacher association actively participates to strengthen and support the following: 1. SKILLRACK - Training program · To enhance the students with complete knowledge of IT applications, programming knowledge, troubleshooting, and development. · To give hands-on experience to the students from their first year. • To assist students with the programmed learning system and continuous monitoring of student's progress, by the faculty members. The Roles played by PTA: • To help identifying the trainers • To provide career guidance about avenues open after graduation \cdot To help in organizing Skill rack Training Programme \cdot Providing Training process awareness to our students. 2. Industrial Visits: . Industrial visits are considered as a part of college curriculum and its objectives are to provide students an insight regarding internal working of companies. We believe that theoretical knowledge is not enough for a good professional career and thus we aim to go beyond academics and provide students a practical perspective on the world of work. It contributes to the achievement of various essential learning outcomes and programme objectives. The Roles played by PTA Suggesting the best class industries Involved in seeking permission for Industrial visits Communicating with the faculty in charge for Industrial visits. Permitting the students visiting their own Industries 3. Mentor-Mentee facility for students The College has a system of allotting a faculty member as mentor for each class. In the mentoring process, the mentor helps in both personal as well as professional inconveniences faced by the students. The mentor makes an effort to know and understand the goals and interests of a student to advance the educational and personal growth of the student. The Roles Played by PTA Actively participating in Mentoring Process Guiding the students in their studies, career plans and goals The Mentor along with PTA , helps in solving both personal as well as professional inconveniences faced by the students. The mentor makes an effort to know and understand the goals and interests of a student to advance the educational and

personal growth of the student

6.5.3 – Development programmes for support staff (at least three)

are: 1. Technical skills Enhancement Training: Our Management encourages learning and up-skilling our supportive staff for their personal growth so that they will be more productive and engaged. Depending upon the nature of job and tasks, the technical skill enhancement training will be imparted to our supportive staff. There are few basic technical training Programs: Indian Electricity Rule and Code of Practices, Designed to discuss the basics of the Indian electricity rule and various code of practices by NITTR. Personalised Medicine: New Era in Biomedicine 2. Soft skill Training- For Admin staffs Soft skills are like the axle on which the wheel of inter-personal skills rotates. They are not just the core of successful communications but they also help develop strong leadership, delegation, teamwork, and communication abilities, can help them to deliver results that please everyone, and even positively influence their official life . . Communication Skill Enhancement Training for Administrative staff by Strides Consulting Inc. 3. Fire safety training The purpose of the fire safety training programme is to educate people to respond in the event of fire alarms, and where the safety assembly point is. Employees should know not only where they are meant to go, but the safest routes they can take. It also makes sure that everyone knows how to operate exit devices, such as fire doors. Training Demonstration programme on Fire Fighting

6.5.4 – Post Accreditation initiative(s) (mention at least three)

IQAC of St. Joseph's College of Engineering has been actively involved in maintaining quality within the institution through Ranking(NIRF Participation), Green Audit, Waster Audit, Carbon FootPrint, Energy Audit. Academic and Administrative Audits of all departments of Institution and its Followup action Feedback from stakeholders and its Analysis to improve Teaching Learning process Value added courses Pre-placement training programmes were conducted to enhance the level of placement. Collaborative interactions with industries through industrial projects, industrial visits in-plant training and internships. Publishing Students innovative research ideas in reputed journals. Different events related to Sports / NSS.Activities like seminar, conference, symposium, Professional Society, Club Activities

6.5.5 - Internal Quality Assurance System Details

| a) Submission of Data for AISHE portal | Yes |
|--|-----|
| b)Participation in NIRF | Yes |
| c)ISO certification | No |
| d)NBA or any other quality audit | Yes |

6.5.6 – Number of Quality Initiatives undertaken during the year

| Year | Name of quality initiative by IQAC | Date of conducting IQAC | Duration From | Duration To | Number of participants |
|------|--|-------------------------|---------------|-------------|------------------------|
| 2019 | E TABS | 27/06/2019 | 27/06/2019 | 02/08/2019 | 61 |
| 2019 | Advanced Total Station | 05/08/2019 | 05/08/2019 | 09/08/2019 | 56 |
| 2019 | Civil Engineer - A Part Of Environment Agriculture | 06/08/2019 | 06/08/2019 | 06/08/2019 | 61 |
| 2019 | Role Of Geologists In Civil | 23/08/2019 | 23/08/2019 | 23/08/2019 | 60 |

| | Engineering | | | | | |
|------|---|------------|------------|------------|----|--|
| 2019 | STAAD Pro Software | 02/12/2019 | 02/12/2019 | 06/12/2019 | 60 | |
| 2019 | Construction Management using Primavera P6 | 12/03/2020 | 12/03/2020 | 12/03/2020 | 42 | |
| 2019 | FDTP on Mass Transfer | 17/06/2019 | 17/06/2019 | 22/06/2019 | 30 | |
| 2019 | FDTP on The Global Challenges of Desalination | 25/11/2019 | 25/11/2019 | 08/12/2019 | 55 | |
| 2019 | Aspen Plus - VAC | 26/06/2019 | 26/06/2019 | 28/06/2019 | 63 | |
| 2019 | Cheminform atics - VAC | 04/07/2019 | 04/07/2019 | 06/07/2019 | 63 | |
| | <u>View File</u> | | | | | |

CRITERION VII – INSTITUTIONAL VALUES AND BEST PRACTICES

7.1 - Institutional Values and Social Responsibilities

7.1.1 – Gender Equity (Number of gender equity promotion programmes organized by the institution during the year)

| Title of the programme | Period from | Period To | Number of Participants | |
|--|-------------|------------|------------------------|------|
| | | | Female | Male |
| TECHMERIZE - Special Technical competitions for girl students conducted by IEEE Student Branch Chapter - Women in Engineering affinity group | 05/08/2019 | 05/08/2019 | 58 | Nill |
| BORN TO WIN - Women specific quiz and word power events, conducted by IEEE Student Branch Chapter - Women in Engineering affinity group | 17/02/2020 | 17/02/2020 | 45 | Nill |
| HER NATION - | 12/03/2020 | 12/03/2020 | 40 | Nill |

| Women specific event about current affairs knowledge testing, conducted by IEEE Student Branch Chapter - Women in Engineering affinity group | | | | |
|--|------------|------------|-----|------|
| FLAMINGO 2K20 - Women specific online Photographic contest, conducted by IEEE Student Branch Chapter - Women in Engineering affinity group | 07/04/2020 | 07/04/2020 | 100 | Nill |

7.1.2 - Environmental Consciousness and Sustainability/Alternate Energy initiatives such as:

Percentage of power requirement of the University met by the renewable energy sources

1.25 Percentage

7.1.3 - Differently abled (Divyangjan) friendliness

| Item facilities | Yes/No | Number of beneficiaries |
|---|--------|-------------------------|
| Physical facilities | Yes | 3 |
| Provision for lift | Yes | 3 |
| Ramp/Rails | Yes | 3 |
| Rest Rooms | Yes | 3 |
| Scribes for examination | Yes | 1 |
| Special skill development for differently abled students | Yes | 3 |
| Any other similar facility | Yes | 3 |

7.1.4 - Inclusion and Situatedness

| Year | Number of initiatives to address locational advantages and disadva ntages | Number of initiatives taken to engage with and contribute to local community | Date | Duration | Name of initiative | Issues addressed | Number of participating students and staff |
|------|---|--|----------------|----------|-----------------------|-----------------------------|--|
| 2019 | 26 | Nill | 15/06/2 019 | 1 | Industry visits to | Campus situated in IT | 1482 |

| | | | | | IT | corridor | II |
|------|------|-----|----------------|---|--|---|------|
| | | | | | companies | Visits organised to IT company i nfrastruc ture awareness | |
| 2019 | 1 | 1 | 15/02/2 020 | 1 | Traffic Pollution awareness camp | IT corridor Traffic and air pollution curtailin g measure | 25 |
| 2019 | 1 | 1 | 22/02/2 020 | 1 | Traffic Pollution awareness camp | IT corridor Traffic and air pollution curtailin g measure | 24 |
| 2019 | Nill | 117 | 29/06/2 019 | 1 | Orphana ge, Aged people and CP children Home visits | Offering special lunch and needy things, support to downtr odden | 6084 |
| 2019 | Nill | 1 | 10/02/2 020 | 1 | OSA Sci entific d emonstrat ion | | 39 |
| 2019 | Nill | 13 | 06/07/2 019 | 3 | Blood Donation activity through Y R C team | health and life saving through Blood donation | 13 |
| 2019 | Nill | 1 | 03/08/2 019 | 1 | SCIENCE CARNIVAL | Potential learning and oppor tunities in engine ering domain | 47 |
| 2019 | Nill | 1 | 31/08/2 019 | 1 | SCIENCE CARNIVAL | Potential learning and oppor tunities | 52 |

| | | | | | | in engine ering domain | |
|------|------|---|----------------|---|---------------------|--|----|
| 2019 | Nill | 1 | 10/10/2 019 | 1 | SCIENCE CARNIVAL | Potential learning and oppor tunities in engine ering domain | 48 |
| 2019 | Nill | 1 | 16/10/2 019 | 1 | SCIENCE CARNIVAL | Potential learning and oppor tunities in engine ering domain | 53 |

7.1.5 – Human Values and Professional Ethics Code of conduct (handbooks) for various stakeholders

| Title | Date of publication | Follow up(max 100 words) |
|------------------------------|---------------------|---|
| Code of Conduct for Staffs | 01/06/2019 | The rules and regulations and its latest Amendments were discussed with staff members during the Semester beginning staff meeting which was held on 05-06-2019 at 3pm. The principal, Dean, Heads of the department have illustrated the complete code of conduct and monitor the follow up of objectives during implementations. |
| Institutional Core Values | 01/06/2019 | The Institutional Core values were discussed with students and staffs during the Semester Orientation program which was held on 2nd year: 10-06-2019 3rd year: 11-06-2019 4th year: 12-06-2019. The principal, Dean, Heads of the department, Controller of Examinations, Placement officer, ABHS in-charges and Disciplinary committee members have illustrated the objectives of every core |

| | | value and monitor its follow up during implementations. |
|------------------------------|------------|---|
| Code of Conduct for Students | 01/06/2019 | The rules and regulations and its latest Amendments were discussed with students during the Semester Orientation program which was held on 2nd year: 10-06-2019 3rd year: 11-06-2019 4th year: 12-06-2019. The principal, Dean, Heads of the department, Controller of Examinations, Placement officer, ABHS in-charges and Disciplinary committee members have illustrated the complete code of conduct and monitor the follow up of objectives and during implementations. |
| Academic Calendar | 01/06/2019 | The HODs and Principal periodically monitor the effective implementations of the academic events that are mentioned in Academic Calendar such as: • Course delivery plan and its follow up • Dedicated tutorial hours for problematic subjects • Uploading of Course materials periodically to student's web portal • Usage of NPTEL video lectures and Webinar classes (online / offline sessions) by eminent personalities • Communication Enhancement Training for evaluation • Conduction of Business English Certificate programme • Curriculum gap is bridged by Guest lectures and Industrial visits and Value added certificate program • Assessment of Course outcomes by Model and End semester exams results • Conducting Repeat laboratory sessions |

7.1.6 - Activities conducted for promotion of universal Values and Ethics

| Activity | Duration From | Duration To | Number of participants | | |
|------------------------------------|---------------|-------------|------------------------|--|--|
| Ifthar Celebrations | 12/06/2019 | 12/06/2019 | 55 | | |
| One Student One Tree Initiative | 13/08/2019 | 13/08/2019 | 300 | | |
| Deepavali Celebrations | 25/10/2019 | 25/10/2019 | 850 | | |
| Christmas Celebrations | 20/12/2019 | 20/12/2019 | 625 | | |
| Legal awareness program for women | 05/03/2020 | 06/03/2020 | 120 | | |
| Women's day Celebration | 11/03/2020 | 11/03/2020 | 200 | | |
| <u>View File</u> | | | | | |

7.1.7 – Initiatives taken by the institution to make the campus eco-friendly (at least five)

• Incandescent lamps had been replaced with LED lamps thus saving electric energy. • Air conditioning of newly established labs were made with highly efficient floor standing A.C • Emission from the college buses appreciably reduced by adoption of speed Governor and regular exhaust gas monitoring. • Paper- less office: Circulars from Principal and Administration office were conveyed to all only through emails. • A roof-top rain water harvesting structures were built in all buildings which were used for ground water recharge. • The Students were involved in "ONE STUDENT ONE TREE" initiative on 13th Aug, 2019 and planted 300 saplings in the campus

7.2 - Best Practices

7.2.1 – Describe at least two institutional best practices

Best Practice 1 Engineering Awareness Camps to School students St. Joseph's plays a pivotal role in inculcating engineering awareness among young minds of school students, based on their expectations. School Students with a strong engineering mind creates opportunities to explore higher education. There is a curious engineer in every child and early college awareness is a key step to raise their aspirations to access opportunities. As a part of silver jubilee commemorations, every department ventured in hosting Skill development classes, Seminars, Field trips, Competitions and Science Fairs on various themes of engineering deeds to navigate the school students and to choose a related career. In order to motivate their talents, attractive cash prizes and awards worth of 3.5 lakhs were distributed the winners. The awareness programs were planned only on Saturdays in the month of August, September and October 2019 in such a way to enable free access to school students without affecting their regular school working schedule. Our college provided free bus facility for easy commutation of school students. In addition, a special lunch and refreshment snacks were also been offered. Totally 3302 school students from 155 schools from all over Tamilnadu have attended these camps and got benefitted. This noble act would have initiated a mass movement among school students towards engineering awareness to rightly plan their future career. Best Practice 2 St. Joseph's Civil Service Academy Bureaucracy is the key to good governance and administration. To be a civil servant, a candidate must be given intensive structured training to crack the civil services examinations. Keeping this concern and to motivate the students who would prospectively become bureaucrats in the future, our college has taken a larger measure

through initiating "St. Joseph's Manidhaneyam Civil Services Academy". The Academy aims to create an avenue for the students to explore the opportunities in Indian Civil Services (Group I services). It offers free of cost training to our students those who aspire to be an efficient civil servant. The student aspirants were selected based on their scores in screening tests and trained by the best trainers, acquired from various leading IAS Academies in Chennai to cross Prelims, Mains and Interview and join the elite civil service. Currently 40 aspirants are being trained and their performance is periodically monitored by conducting series of assessment tests. Also the academy conducts frequent resourceful seminars, which help the students to gain an insight into the innovative strategic examination preparation process, countering the competitiveness, responsibility, honesty and leadership etc. These innovative measures of the academy make the toughest journey for preparing Civil Services Exam into an achievable goal to our students. Thus our trained civil servant would serve as an instrument of good governance and foster socio-economic development of the nation to add value to the society.

Upload details of two best practices successfully implemented by the institution as per NAAC format in your institution website, provide the link

https://stjosephs.ac.in/NAAC/7.2Best%20Practices%202019-20.pdf

7.3 – Institutional Distinctiveness

7.3.1 – Provide the details of the performance of the institution in one area distinctive to its vision, priority and thrust in not more than 500 words

St. Joseph's Social Extension Activities: To give to the needy is true charity. Our management desires for extending the support to the homes for Orphanages, the Aged people and Children suffering with cerebral palsy etc. through St. Joseph's Non-Governmental Organization named "St. Joseph's Vidivelli" which was formed in 2013. St. Joseph's NGO is committed to contribute more than Rs. 85 lakhs towards the welfare of these homes by donating infrastructure developments, teaching and learning aids, medicines, sanitary requirements, food and cloth requirements etc. It also supports the Primary Health Centres, Panchayat schools in and around our college to support the needy peoples. Within a span of eight academic years, our students have made 1125 NGOs visits that includes, 816 Orphanages, 209 old age homes and 100 CP children homes, which are located in and around Chennai. Every semester during working Saturdays, our college meticulously organises these NGO visits by incorporating this into our regular academic calendar itself. On the day of the NGO visit, our college offers special lunch (both vegetarian and non-vegetarian dishes with sweets, savouries and ice creams) to all the inmates of Orphanages and old age homes. Our students are provided with transport facilities to visit the homes on activity Saturdays. All the students, from first year to final year both UG and PG enthusiastically participate and mingle with in mates of the homes and spent their daytime with them to share their happiness. So far 'St. Joseph's vidivelli' had sponsored around Rs. 75 lakhs and the students have willingly volunteered to spend their pocket money in a useful manner by offering the basic needs such as rice bags, groceries, toys, cloths, pillows, medicines, etc. for the inmates. In addition, for the past eleven years, our college provides evening snacks to the students of Government Higher Secondary School at Semmencherry, Panchayat Union middle school at Navalur and also breakfast for Government higher secondary school at Sholinganallur. Our student volunteers are regularly involved in evening coaching classes along with school teachers for the 10th standard school students. Our student's efforts resulted in increase in pass percentage in public examinations, and this year it is expected to reach more than 90. To motivate the young minds in the professional higher education, we have conducted more than 10 awareness camps for school children in our college campus. More than 10000 school students have

successfully participated in various activities such as, Programming, Project exhibition, Quiz competition, Essay writing etc and got benefited. The entire cost of food and transportation for these meets were sponsored by our College. All these activities and regular NGO visits provides our students, an awareness of the existence of poor, downtrodden lifestyle and also a feeling to acknowledge their own good fortune and created a sense of duty towards those less fortunate which is the need of the hour for our country's development. Thus our distinct 'St. Joseph's social extension activities' mould our students as service minded and thereby make them responsible citizens.

Provide the weblink of the institution

https://stjosephs.ac.in/NAAC/7.3.1Institutional%20Distinctiveness%202019-20.pdf

8. Future Plans of Actions for Next Academic Year

Institution has been initiating and implementing diverse activities to improve quality in the different aspects of academics, co-curricular and extracurricular activities, faculty development. In view of the Institution vision, mission and core values, Institution has planned for following initiatives. 1. To improve interaction with industries, Students are encouraged to take up online skill development courses (NPTEL, SWAYAM, COURSERA, etc.), internships and industry sponsored projects. 2. Institution has planned for obtaining autonomous status to impart academic flexibility towards recent developments. 3. All the faculty members are advised to improve research publications in Web of Science and Scopus indexed journals with high citation index. 4. It is planned to conduct more faculty development activities for enriching the expertise of faculties assessing research and academic performance. 5. More focus on innovation and Skill development for enhancing employability of students. IIC-Institution Innovation Council organizes many activities such as Workshops , Guest Lectures , Innovative Ideas Competitions and contests. Students will showcase their skills and talents through active participation and involvement in the activities