

Yearly Status Report - 2018-2019

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	OMR, Chennai.		
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/SSR%20in%2 ONAAC.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%202018-19.pdf
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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					
NBA	22-Mar-2019 01	5			

Academic & Administrative Audit	22-Mar-2019 01	11			
Analysis of Feedback by Stakeholders	08-May-2019 01	6454			
Feedback from Alumni	10-Apr-2019 01	259			
Feedback from Parents	10-Apr-2019 01	266			
Feedback from Teachers	12-Dec-2018 01	318			
Feedback from Students	05-Dec-2018 01	5611			
IQAC Meetings are Conducted	28-Mar-2019 01	25			
IQAC Meetings are Conducted	17-Sep-2018 01	25			
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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
Mrs.G. Lathasel vi/Computer Science and Engineering	Students Project Scheme	Tamil Nadu State Council for Science and Technology	2019 365	5000
Dr. G. Baskar/B iotechnology	DBT	Department of Biotechnology (DBT), New Delhi	2015 1460	580000
Dr. G. Baskar/B iotechnology	Science & Engineering Research Board (SERB)	Department of Science and Technology.	2015 1095	800000
Dr.V.Muthulaksh mi/Information Technology	Unnat Bharat Abhiyan	Government of Tamil Nadu (UBA)	2018 730	150000
Dr.V.Muthulaksh mi/Information Technology	Skill and Personality Development Programme Centre for Sc/ST Students	AICTE, New Delhi	2018 730	469500
Dr.B.VictoriaJa ncee/Electronic s and Communication Engineering.	MODROBS	AICTE, New Delhi	2019 365	1093600
Mr.D.Dinesh Kum	Students	Tamil Nadu	2019	7500

ar/Electronics and Instrumentation Engg.	Project Scheme	State Council for Science and Technology	365		
Dr.S.Rajesh Kan nan/Electronics and Communication Engg.	Students Project Scheme	Tamil Nadu State Council for Science and Technology	2019 365	7500	
Dr.K.M.Kumar/Me chanical Engineering.	Students Project Scheme	Tamil Nadu State Council for Science and Technology	2019 365	7500	
Mrs.B.Sangeetha /Biotechnology	Students Project Scheme	Tamil Nadu State Council for Science and Technology	2019 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)

1.IQAC of St. Joseph's College of Engineering has been actively involved in maintaining quality within the institution through Ranking(NIRF Participation) and NBA Audits for Departments(ECE, Chemical Engineering, Biotechnology, Electronics and Instrumentation, Information technology) 2.Academic and Administrative Audits of all departments of Institution and its Followup action 3.Feedback from stakeholders and its Analysis to improve Teaching Learning process 4.Value added courses Preplacement training programmes were conducted to enhance the level of placement. 5.Collaborative interactions with industries through industrial projects, industrial visits inplant training 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 Rs31,28,100/- is undergining in college
Journal Publications	More focus on scopus journal publications 138 publications in this current Academic Year
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
E-resource facilities upgradation in Central library	Faculties and students to get more access to e journals, e-books and periodicals
Orientation Programmes	Orientation programme for first year students which helps the students to get acclimatised with campus life, curriculum and administrative procedures

14. Whether AQAR was placed before statutory body ?

Yes

Name of Statutory Body	Meeting Date
Governing Council	13-May-2019
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	2019
Date of Submission	07-Jan-2019
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, cataloging, data updating, serial

control, searching all types of documents report generating etc.

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

Operational curriculum delivery is carried out in the Institution through a well-documented approach. • In accordance with academic schedules given by the university an Academic Calendar encompassing working days schedule, internal assessment examinations, guest lectures, Industrial visits value added courses etc., is prepared every semester. • Allocation of subjects to the faculty members is done after careful consideration of their subject expertise besides their choice. • Course study material such as lecture notes, question bank, lab manuals are prepared by the allotted faculty members focusing on the outcome based education and Bloom's Taxonomy. These materials are uploaded in the students' portal for their reference. The details of uploading are recorded by the departments and periodically monitored by the Principal. 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. • Unit 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 the current year, 32 Guest lecture on topics covering recent trends were arranged with experts drawn from academia and industry, 37 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, 54 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 Introduction	Duration	Focus on employ ability/entreprene urship	Skill Development
JAVA, Big Data,	-	26/06/2018	5	Employabilit Y	To Penlight knowledge on

Machine Learning, Raspberry Pi(python), Ethical Hacking					Data Science, Ethical Hacking, Python JAVA
Analytical and Numerical Computing using SAGE	-	27/06/2018	5	Employabilit Y	Numerical Problem Solving using Open source software SAGE
Hands on Experience in 2 Wheeler Motor Cycle Assembly and Dismantling	-	27/06/2018	5	Employabilit Y	Complete 2 Wheeler -Mechanisms Service and Maintenance.
NVH-Vehicle Dynamics		27/06/2018	5	Employabilit Y	1. Vibration Measurement Techniques 2. Vehicle D ynamics- Field Testing 3. Vibration Based Condition Monitoring in 2 wheeler Automobile
PCR DNA Finger printing Techniques-	-	25/06/2018	5	Employabilit Y	Advanced exposure to these techniques
Introduction to 32 bit ARM CORTEX- MO Microcont roller progr amming(EVA02 3)	-	27/06/2018	5	Embedded Engineer	This course mainly deals with an Embedded Systems and microcontrol ler (CPU, Busses, Memory, I/O ports).
Automation usin PLC and HMI (EVA024)	-	27/06/2018	5	PLC Design ENGINEER	This course deals mainly with data acquisition and management in a system. Students learnt about the communic

					ation with PLC, other hardware and commissionin g of network nodes.
Intelligent Instrumentat ion and Automation	-	20/06/2018	6	Automation Engineer	To learn about intelligent instrumentat ion through piping and i nstrumentati on diagram to address industrial automation using DCS
Internet of Things (IoT) using NodeMCU	-	20/06/2018	6	Embedded IoT Engineer	To Learn programming and implemen tation of IoT application using NodeMCU
Factory Automation	-	20/06/2018	6	Instrumentat ion Maintenance Engineer	To learn about Industrial process control by piping and i nstrumentati on diagram to address industrial automation benchmark problems
Embedded systems	-	20/06/2018	5	Embedded engineer	A good under standing of digital and small signal analog electronics
Robotics	-	20/06/2018	5	Design on Robotics	Knowledge on techniques allowing a robot to adapt to its environment through learning algorithms
Internet of Things	-	20/06/2018	5	Knowledge in IOT	Knowledge on producing

					enhancing potential to automate operations remotely by connecting devices together.
Corporate Readiness Programme	-	27/03/2019	5	Employabilit Y	To gain key corporate and soft skills
NISM Certifi cation	-	01/08/2018	5	Employabilit Y	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	
No Data Entered/N			
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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	01/06/2018
BE	Electrical and Electronics Engineering	01/06/2018
BE	Electronics and Communication Engineering	01/06/2018
BE	Electronics and Instrumentation Engineering	01/06/2018
BE	Instrumentation and Control Engineering	01/06/2018
BE	Computer Science Engineering	01/06/2018
BTech	Information Technology	01/06/2018
BTech	Chemical Engineering	01/06/2018
BTech	Bio Technology	01/06/2018
BE	Civil Engineering	01/06/2018
ME	Software Engineering	01/06/2018
ME	Manufacturing Engineering	01/06/2018

ME	Applied Electronics	01/06/2018
ME	Computer Science and Engineering	01/06/2018
ME	Control and Instrumentation Engineering	01/06/2018
ME	Embedded Systems Technologies	01/06/2018
ME	Power Electronics and Drives	01/06/2018
ME	Power Systems Engineering	01/06/2018
Mtech	Biotechnology	01/06/2018
MBA	Masters of Business Administration	01/06/2018
Integrated(PG)	Master of Business Administration	01/06/2018

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

	Certificate	Diploma Course
Number of Students	1593	0

1.3 – Curriculum Enrichment

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

Communication Skill - I	27/07/2018			
YR (2018-22 Batch)	2770772010	1050		
POP - III YR Aptitude training (2016 - 20 Batch)	07/01/2019	1424		
POP - IV YR Technical training (2015- 19 Batch)	28/05/2018	927		
POP - II YR (2017 - 21 Batch)	25/06/2018	1274		
POP - IV YR Aptitude training (2015- 19 Batch)	11/06/2018	927		
Business English certificate (BEC)	18/06/2018	1312		
Graduate Record Examination (GRE)	01/08/2018	8		
Test of English as a Foreign Language (TOEFL)	01/08/2018	8		
Entrepreneurship Training Program hosted by SIDBI. (MBA)	10/09/2018	25		
Fundamentals of Capital Markets (MBA)	19/12/2019	112		
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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	COMPUTER SCIENCE AND ENGINEERING	546		
BE	ELECTRONICS AND COMMUNICATION ENGINEERING	578		
BE	ELECTRICAL AND ELECTRONICS ENGINEERING	545		
BTech	INFORMATION TECHNOLOGY	508		
BE	MECHANICAL ENGINEERING	524		
BE	ELECTRONICS AND INSTRUMENTATION ENGINEERING	506		
BE	INSTRUMENTATION AND CONTROL ENGINEERING	168		
BTech	BIOTECHNOLOGY	172		
BTech	CHEMICAL ENGINEERING	196		
BE	CIVIL ENGINEERING	212		
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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 analyzed 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 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 on improvements in the curriculum towards industrial requirements. 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. Upcoming exam schedules, planning of various activities, guidelines for department teachers and students, among other issues, are often discussed. The academic committee meetings are held, to discuss and monitor the corrective measures of the feedback, advancement and future strategies for the improvement of institution.

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	Information Technology	180	200	192
BTech	Chemical Engineering	60	75	62
BTech	Biotechnology	60	75	54
BE	Instrumentation and Control Engineering	60	25	19
BE	Electronics and Instrumentation Engineering	180	132	111
BE	Electrical and Electronics Engineering	180	180	159
BE	Computer Science and Engineering	180	210	190
BE	Electronics and Communication Engineering	180	200	183

BE	Mechanical Engineering	180	200	187
BE	Civil Engineering	60	67	60
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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
	students enrolled in the institution (UG)	students enrolled in the institution (PG)	fulltime teachers available in the institution	fulltime teachers available in the institution	teachers teaching both UG and PG courses
	(= =)	` '	teaching only UG courses		
2018	5389	457	286	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
331	331	18	101	9	10

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

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Number of students enrolled in the institution	Number of fulltime teachers	Mentor : Mentee Ratio
5846	331	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	331	0	11	135

2.4.2 – Honours and recognition received by teachers (received awards, recognition, fellowships at State, National, International level from Government, recognised bodies during the year)

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		
2018	Dr.A.Chandra Sekar	Professor	Young Faculty Award		
2018	Dr.A.Chandra Sekar	Professor	Exemplary Educationist Award		
2018	Dr. M. Venmathi	Associate Professor	Best Women Researcher		
2018	Ms. Mary Hanna Priyadharshini J	Assistant Professor	Winner of SIH Award 2019		
2018	Dr. S. Justin Packia Jacob	Professor	Best Scientist Award Epicure		
2018	Dr. G. Baskar	Professor	Outstanding Reviewer Energy		
2018	Dr. M. Chamundeeswari	Professor	Dr. APJ Abdul Kalam Award Of Scientific Excellence		
2018	Dr N VENKATESH	Professor	GOLD MEDAL- NPTEL- IIT Kanpur		
2018	Dr N VENKATESH	Professor	SILVER MEDAL -NPTEL- IIT Roorkee		
2018	Mrs. S. M. Mullaikodi	Associate Professor	BEST RESEARCHER AWARD		
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2.5 - Evaluation Process and Reforms

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
ME	Computer Science and Engineering	2/1	22/05/2019	23/06/2019

ME	Computer Science and Engineering	1/1	01/11/2019	13/02/2019
BE	Computer Science and Engineering	8/4	29/04/2019	23/06/2019
BE	Computer Science and Engineering	7/4	29/11/2018	13/01/2019
BE	Computer Science and Engineering	6/3	04/05/2019	23/06/2019
BE	Computer Science and Engineering	5/3	29/11/2018	13/01/2019
BE	Computer Science and Engineering	4/2	22/05/2019	23/06/2019
BE	Computer Science and Engineering3	3/2	15/11/2018	13/01/2019
BE	Computer Science and Engineering	2/1	18/05/2019	23/07/2019
BE	Computer Science and Engineering	1/1	11/01/2019	13/02/2019
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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.

The performance of the students in internal assessments is monitored by the Principal and the necessary feedback is given to the concerned faculty members. Review Meetings are conducted by the heads of department after each assessment examination to assess the level of understanding of students in different subjects and for planning corrective actions. Special Classes are conducted for the slow learners and absentees in the subsequent weeks. The whole internal assessment process is digitized such that students receive an SMS once the marks are entered online. The department organizes a parent-teacher meet once, every semester, after the university results, where the parents are appraised about the performance of their wards. Students with grievances with regard to evaluation can apply for revaluation of their answer scripts after getting a photocopy of their answer-scripts. In case of further grievance even after revaluation, the students can apply for review of the answer script.

- 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%20Course%20Outcomes.xlsx

2.6.2 - Pass percentage of students

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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
205	BTech	Information Technology	181	160	88.39
203	BTech	Chemical Engineering	72	68	94.44
214	BTech	Biotechnolog Y	55	54	98.18
114	BE	Mechanical Engineering	212	167	78.78
112	BE	Instrumentat	61	41	67.21

		ion and Control Engineering			
107	BE	Electronics and Instrume ntation Engineering	164	134	81.71
103	BE	Civil Engineering	65	42	64.62
105	BE	Electrical and Electronics Engineering	177	149	84.18
104	BE	Computer Science and Engineering	195	150	76.92
106	BE	Electronics and Communic ation Engineering	193	155	80.31
<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%20Final2.7.1.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
Industry sponsored Projects	365	CDCE Automation	2.5	250000
Industry sponsored Projects	365	Gemini cooling systems	2	200000
Industry sponsored Projects	365	Thirumala Roofing and structural Pvt. Ltd	2	200000
Industry sponsored Projects	730	Shibin Exports Pvt. Ltd	3	131000
Major Projects	730	MODROB'S - AICTE, New Delhi	13.67	1093600
Major Projects	730	AICTE, New Delhi	9.39	469500

Major Projects	730	Government of Tamil Nadu (UBA)	5	150000	
Major Projects	1095	Science Engineering Research Board (SERB), Department of Science and Technology.	29.24	800000	
Major Projects	1460	Department of Biotechnology (DBT), New Delhi	25.19	580000	
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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
Six Days Induction/Refresher Programme on Emerging Trends in Embedded Systems and its Real Time Application (02/07/2018-07/07/2018)	Electrical and Electronics Engineering (AICTE-ISTE)	02/07/2018
National level workshop on health care using IOT (04/02/2019 - 05/02/2019)	Information Technology (Tamilnadu State council for Science and Technology)Information Technology (Tamilnadu State council for Science and Technology)	04/02/2019
One day Entrepreneurship awareness workshop	ED Cell, St.Josephs College of Engineering	19/07/2018
Three days Entrepreneurship Development Workshop	ED Cell, St.Josephs College of Engineering	23/08/2018
5 Days training on Entrepreneurship Development (10-9-18 to 16-9-18)	ED Cell along with Small Industries Development Bank of India (SIDBI) and ICT Academy	10/09/2018
Indias first Leadership Talk series	ED Cell, St.Josephs College of Engineering	08/01/2019
One day workshop on Intellectual Property Rights	ED Cell, St.Josephs College of Engineering	10/01/2019
Indias first Leadership Talk series episode 2	ED Cell, St.Josephs College of Engineering	24/01/2019
Big Idea Competition	ED Cell, St.Josephs College of Engineering	13/02/2019

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
Automatic Production Planning and Scheduling of size	Ms.Anusha.S Ms.Ajitha.R Ms. ArthyLakshmi.R Ms.ChettyJayasr uthi.P Ms.Andria Janet Evangeline Mr.A dithyaAbhisek (CSE)	Smart India	03/03/2019	Won consolation prize and Cash award Rs.10,000.in Smart India Hackathon 2019
Mobile Application for Bike E- Catalogue using Augmented Reality	Mr.Dhanoosh Lakshman.S Mr.George Joseph Mr.Gokul Prakash.P Mr.Jamuna Devi. G Devadharshini.M (CSE) Mr.Dhushyanth Chowdary.E	Smart India Hackathon 2019, by Yamaha India Pvt.Ltd.	03/03/2019	Won Ist prize and Cash award Rs.1,00,000.in Smart India Hackathon 2019
Presenting Way points Navigation Aids, ATS routes on Google Earth	Mr.Alvis. F Ms.Anuradha Krishnarathinam Ms.Aiswariya.R Mr.Ashueosh Patole Mr.Agash Chandar Mr.Daniel David (CSE)	Smart India Hackathon 2019, by Ministry of Civil and Aviation.	03/03/2019	Won Ist prize and Cash award Rs.1,00,000.in Smart India Hackathon 2019
Robitics and Drones	Ms.S.Haritha, Ms.K.J.Gladys Ms.J.Mary Florance Mr.C.Jagadeesh Mr.C.Balaji (IT)	AICTE Smart India Hackathon 2019, held at Sri Venkateswara College of Engg., Thirupathi.	03/03/2019	Awarded Rs 50,000 for winning AICTE Smart India Hackathon 2019
Smart Wearables for Fall Prevention at High Tower Area	Kamal Kumar L S and Kishore Vigneshwar R (CSE)	Nokia Technologu Day - Prototype Presentation Nokia Factory, Oragadam	16/10/2018	Special Award with a cash prize of Rs 8,000
MyProbuddy - AI Guidance	Amrish Krishnan, Raghu Nandhan, Vigneswaran R Hariharan S (CSE)	Nokia Technologu Day - Prototype Presentation Nokia Factory, Oragadam	16/10/2018	Place Won: III Place Cash prize Rs 12,000
Tencor - Advertisement using Facial	Amrish Krishnan, GuruSakthi,	Ideathon 2018 Venue: Bangalore	26/08/2018	Place Won: III Cash Prize: Rs 20,000

Recognition	Hari Haran, Manoj S Raghu Nandhan (CSE)						
Fabrication of Novel Pesticide detection tool and its application in Food samples	R.Hemalatha (BT) Mentor: Mrs. Yuwvarani	Indian National Academy of Engineering	13/12/2018	INAE Award 2018			
Contribution in Biotechnology	Dr. M. Chamundeeswari	Marina Labs , Chennai	13/10/2018	Dr. APJ Abdul Kalam Award Of Scientific Excellence.			
Significant contribution in the field of Na nobiotechnology		Epicure Bio-Med Pvt, Ltd	16/02/2019	Best Scientist Award, 2018			
	<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
-	-	ı	Cleaning Material Formulation	Own use	16/07/2018
-	-	1	Mushroom Cultivation Unit	Giving training on mushroom cultivation and spawn production.	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	1	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	3
Electrical and Electronics Engineering	2
Electronics and Communication Engineering	1

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)
International	Science and Humanities	7	2

International	Instrumentation and Control	1	2			
International	Biotechnology	21	3			
International	MBA	4	0			
International	Mechanical Engineering	27	1			
International	Computer Science and Engineering	34	1			
International	Electronics and Communication	23	1			
International	Electronics and Instrumentation	19	1			
International	Information Technology	17	1			
International	Electrical and Electronics	21	1			
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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 Communication Engineering	8			
Mechanical Engineering	5			
MBA	5			
Biotechnology	2			
Chemical	1			
Electrical and Electronics Engineering	22			
Instrumentation and Control	5			
Information Technology	13			
Electronics and Instrumentation	31			
Computer Science	17			
<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
Zno Nano Flowers Catalyzed Synthesis, Luminescen ce and Ant imicrobial Studies of	K. Jayamoo rthy	DJ Journal of Enginee ring Chemistry and Fuel	2019	0	St. Josephs College of Engineerin g	2

Some Y- Shaped Imidazole Derivative s						
Preparatio n and char acterizati on of core- shell type Ag@SiO2 na noparticle s for phot odynamic cancer therapy	K.Jayamoor thy	Photodiagn osis and P hotodynami c Therapy	2019	43	St. Josephs College of Engineerin g	6
Antiosteop orotic effect of Hydrilla v erticillat a against lead induced damage in bone samples of edible fish Labeo rohita - an FTIR approach	S. Suresh,	Materials Science and Engine ering: C	2018	117	St. Josephs College of Engineerin g	23
Switch-on fluorescen ce of 5-am ino-2-merc apto benzi midazole by Mn3O4 n anoparticl es: Experi mental and theoretica l approach	K. Jayamoo rthy	Journal of Luminescen ce	2018	110	St. Josephs College of Engineerin g	19
Highly selective and methanol resistant polypyrrol e laminated SPVdF-co- HFP/PWA proton exchange	A.Uma Devi	Materials Chemistry and Physics	2018	143	St. Josephs College of Engineerin g	11

membranes for DMFC a pplication s						
Distributi on of Heavy Metals in the Marine Sediments of Various Sites in K araichalli Island, Tuticorin, Gulf of Mannar, India	K. Jayamoo rthy	Silicon	2018	21	St. Josephs College of Engineerin g	14
Structural , optical and piezoe lectric in vestigatio n on new Brucinium Chlorate di-hydrate NLO single crystal for optoel ectronic, piezo- sensor, transducer and OLED a pplication s	P.Krishnan	Optical Materials	2018	98	St. Josephs College of Engineerin g	11
Synthesis, characteri zation of Bi/ZnO and its photoa ctivity towards TB, AR 27 RR 120 deg radation under UV-A light	B.Subash	Optik	2019	57	St. Josephs College of Engineerin g	16
Structural , optical and piezoe lectric in vestigatio n on brucinium	P.Krishnan	Journal of Molecular Structure	2019	98	St. Josephs College of Engineerin g	6

hydrate non linear optical single crystal for optical parametric oscillator s, high- power laser, pie zo-sensors and transd ucers appl ications						
Applicatio n of domination integrity of graphs in PMU placement in electric power networks	Saravanan, M	Turkish Journal of Electrical Engineerin g and Computer Sciences	2018	28	St. Josephs College of Engineerin g	13

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
Segmentati on of Ischemic Stroke Lesion in Brain MRI Based on Social Group Opti mization and Fuzzy- Tsallis Entropy	Rajinikant h V	Arabian Journal for Science and Engine ering	2018	37	47	St. Joseph's College of Engineerin g
Contrast enhanced medical MRI evaluation using Tsallis entropy	Sri Madhava Raja N	Journal of Ambient In telligence and Humanized Computing	2018	28	50	St. Joseph's College of Engineerin g

and region growing se gmentation						
Social group opti mization supported segmentati on and evaluation of skin melanoma images	Rajinikant h V	Symmetry	2018	36	55	St. Joseph's College of Engineerin g
Biodiesel production from castor oil using hete rogeneous Ni doped ZnO nanoca talyst	Baskar G., Aberna Ebenezer S elvakumari I., Aiswarya R.	Bioresourc e Technology	2018	273	68	St. Joseph's College of Engineerin g
Multi- level image thre sholding using Otsu and chaotic bat algorithm	Sri Madhava Raja N.,	Neural Computing and Applic ations	2018	68	67	St. Joseph's College of Engineerin g
An ACO-ANN based feature selection algorithm for big data	Joseph Manoj R	Cluster Computing	2019	41	29	St. Joseph's College of Engineerin g
An approach to examine Magnetic Resonance Angiograph y based on Tsallis entropy and deformable snake model	Rajinikant h V	Future Generation Computer Systems	2018	105	28	St. Joseph's College of Engineerin g
Automated Detection of Alzheimers Disease	Rajinikant h V	Journal of Medical Systems	2019	70	27	St. Joseph's College of Engineerin g

Using Brain MRI Images' A Study with Various Feature Extraction Techniques						
Design of D-shaped elliptical core photonic crystal fiber for blood plasma cell sensing ap plication	Vasudevan B	Results in Physics	2019	41	26	St. Joseph's College of Engineerin g
Effect of additives on perform ance, combustion and emission behavior of preheated palm oil/diesel blends in DI diesel engine	Senthur Prabu S., Asokan M.A., Prathiba S., Ahmed S., Puthean G.	Renewable Energy	2018	174	23	St. Joseph's College of Engineerin g

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

Number of Faculty	International	National	State	Local		
Attended/Semina rs/Workshops	1	16	69	233		
Presented papers	31	11	0	0		
Resource persons	5	8	0	0		
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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	
---	--

YRC	Blood donation camp	2	5	
NGO	Orphanage /old age home	170	3400	
NSS CAMP	NSS units 1 2/Anna University	3	100	
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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		
Computer Literacy program for school children	ı	-	50		
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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			
Social Out reach programme	Government Higher secondary school	Support to school student studies	2	250			
	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
Faculty exchange	Dr. G. Baskar	Swiss Federal Institute of Technology (EPFL) fellowship	60
Collaborative activities	Nilanjan Dey, V. Rajinikanth Fuqian Shi c João Manuel R.S. Tavares d Luminita Moraru K. Arvind Karthik f Hong Lin g K. Kamalanand C. Emmanuel	-	365
Collaborative activities	V. Jahmunah, Shu Lih Oh, Rajinikanth V, Edward J.Ciaccio, Kang Hao Cheong, Arunkumar, U. Rajendra Acharya	-	365
Collaborative activities	Steven Lawrence Fernandes U. John Tanik V.	-	365

	Rajinikanth K. Arvind Karthik		
Collaborative activities	Wang, Y, Shi, F, Cao, L, Dey, N, Wu, Q, Ashour, AS, Sherratt, S, Rajinikanth, V,	-	365
Collaborative activities	Wang, Y, Chen, Y, Yang, N, Zheng, L, Dey, N, Ashour, AS, Rajinikanth, V	-	365
Collaborative activities	Manic, KS, Naimi, IS Al, Hasoon, FN, Rajinikanth, V	-	365
Collaborative activities	Rajinikanth, V, Satapathy, SC, Dey, N, Fernandes, SL, Manic, KS	-	365
Collaborative activities	Rajinikanth, V, Thanaraj, KP, Satapathy, SC, Fernandes, SL, Dey, N.	-	365
Collaborative activities	Monisha, R, Mrinalini, R, Britto, N Sri Madhavaraja, Ramakrishnan, R, Rajinikanth, V	-	365
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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
Food Biotech nology	Field Trip	Shibin Exports , Chengalpet	11/07/2018	11/07/2018	57
Life science company	Field Trip	Eppendorf India Private Limited Plot No. 18, 19, 20 (Part) Ambit Park Road Sidco Industrial Estate (South)	09/07/2018	09/07/2018	51

		Ambattur Chennai 600 058			
Isolation of DNA , RNA and Proteins	Internship	Trichy Research Institute of Biotechnolog y Pvt. Ltd 107-D, 2nd floor, 9th Corss (East), Thillai Nagar, Trichy - 620018	01/12/2018	06/12/2018	1
Production and testing of animal vaccines	Internship	Pasteur Institute of India Nilgiris, Coonoor, Tamil Nadu 643103 Phone: 0423 223 1250	16/11/2018	20/11/2018	6
Biomedical instuments handling	Internship	C.S.I. Kalyani Mult ispeciality Hospital # 15, Dr Radha Krishnan Salai, Loganathan Colony, Mylapore, Chennai, Tamil Nadu 600004 Phone: 044 2847 6433	26/11/2018	01/12/2018	1
ESBL Linked resistance detection	Internship	Biozone Research Technology Pvt Ltd 7, Leo Muthu Street, Kalaimagal Nagar, Ekkat uthangal, Chennai - 600032, Tamil Nadu Phone: 044 22250952, 91 9952912012 Gmail: biozo	25/05/2018	15/06/2018	16

		ne.info@gmai l.com			
Fermentation Technology	Internship	Bio Lim 159/385, Konnur High Road, Ayanavaram, Chennai - 600023. Tamil nadu, India Landmark: Next to Rudran hospital. Phone: 91 9952112131 Website: www .Biolim.org	24/12/2018	29/12/2018	2
Basic molecular biology Techniques	Internship	Baba clinical genomic research centre genetic molecular diagnostics TICEL Bio park - II BTCIF, 1st floor, NO.5, CSIR Road, Taramani, Chennai, Tamil Nadu 600113	17/12/2018	20/12/2018	1
Biofertilize r formulation	Internship	ArmatsBiotek Training Research Institute (ABTRI) Adress: # New 14/18 Mettu street / Link road (Near P. V. KalyanaManda bam) Maduvan karai, Guindy, Chennai - 6000 32 Phone: 91 44 4350 2783 Mobile: 91 97890 10039 , 91 94448	04/12/2018	09/12/2018	2

		45204 E mail : arm							
Food Biotech nology	Internship	Apex Biotech nology Training and Research Institute Thiru Vi Ka Industrial Estate Ekkad uthangal, Guindy, Chennai 600 032 Tele / Fax: 044 4360 4545 Mobile: 91 99625 22686 E-mail: trai ning@apexbio techtraining in Website: www.apexbiot echtraining. in	24/11/2018	03/12/2018	17				
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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
MEERA LABORATORTIES	01/06/2018	GUEST LECTURE	220
Pristine Info solutions Pvt. Ltd	01/08/2018	Guest Lecture- Ethical Hacking:Purpose of this lecture is to let the students know about what is ethical hacking and how they can take advantage of it to prevent from fraud regarding their hacking situations	382
Averz Technologies	24/10/2018	for collaborative RD activities, Academic activities	35
Pantech Pro labs	24/10/2018	for collaborative RD activities, Academic activities	35
CDCE Automation	13/02/2018	Internship, Value added course	77
Infosys-Campus	18/09/2018	Campus Drive 2018	120

Connect					
Butterfly Gandhimathi Appliances Limited	09/11/2018	Butterfly Gandhimathi Appliances Limited	180		
Goodwin Motors	28/02/2019	Goodwin Motors	199		
Thirumala Roofings and Structurals	12/02/2019	Thirumala Roofings and Structurals	2		
Udvavisk Technologies Pvt Ltd	21/02/2019	Udvavisk Technologies Pvt Ltd	75		
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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
12051400	11743664

4.1.2 – Details of augmentation in infrastructure facilities during the year

Facilities	Existing or Newly Added			
Campus Area	Existing			
Class rooms	Existing			
Laboratories	Existing			
Seminar Halls	Existing			
Classrooms with LCD facilities	Existing			
Seminar halls with ICT facilities	Newly Added			
Classrooms with Wi-Fi OR LAN	Existing			
Value of the equipment purchased during the year (rs. in lakhs)	Newly Added			
Number of important equipments purchased (Greater than 1-0 lakh) during the current year	Newly Added			
<u>View 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	3.1	2003	

4.2.2 - Library Services

Library Service Type	Existing		, , , , , , , , , , , , , , , , , , ,		Total	
Text Books	43786	13771061	953	449373	44739	14220434
Reference Books	2951	9709328	138	110328	3089	9819656

e-Books	492	520891	0	0	492	520891
Journals	123	356597	2	6000	125	362597
CD & Video	3510	323265	11	3000	3521	326265
Weeding (hard & soft)	863	121626	92	4946	955	126572
Others(spe cify)	178552	40353823	250	140919	178802	40494742
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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
Dr. Esther Hannah M	Mobile communications - GSM	Learning Management System	05/04/2019
Dr. Raman C J	Distributed Computing - Mutual Exclusion	Learning Management System	08/04/2019
Ms. Anu Meera	Computer Architecture - Booth's Algorithm	Learning Management System	08/04/2019
Mrs. Ancy S	Data Structures - AVL Trees	Learning Management System	10/04/2019
Dr. M. Chamundeeswari	Genetic Engineering and Genomics -Introduction to Carbon Quantum dots	Learning Management System	30/07/2018
Mr.A.Ruskin Bruce	Engineering Graphics, Basic Mechanical Engineering	Learning Management System	01/12/2018

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	0	0	0	0	0	0	0	0	0
Total	1340	1025	0	50	104	36	71	200	54

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

200 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
Smart classroom	https://stjosephs.ac.in/NAAC/4.3.3%20Fa
	<u>cility%20for%20e-</u>
	<u>content%202018_2019.pdf</u>

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
27694330	23282681	24376550	23601399

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 2018 2019 Procedures%20and%20policies%20for%20maintaining% 20and%20utilizing.pdf

CRITERION V – STUDENT SUPPORT AND PROGRESSION

5.1 - Student Support

5.1.1 – Scholarships and Financial Support

	Name/Title of the scheme	Number of students	Amount in Rupees		
Financial Support from institution	Sports Students Quota	24	3480000		
Financial Support from Other Sources					
a) National	First Graduate Scholarship	432	10800000		
b)International	International Society of Automation (ISA)	1	189140		
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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
Yoga and Meditation	20/08/2018	444	Dr. Hari No.(Old No 118),16th cross Street, Besant Nagar, Chennai 6 00 090 Ph No.044 2446 4387
Personal counselling and mentoring	19/12/2018	2399	Internal Resources
BRIDGE COURSE - LATER ENTRY Students	01/08/2018	65	Internal Resources
BRIDGE COURSE - All Engineering, Science and Humanities Departments	17/08/2018	1309	Internal Resources
C Programming Technical Training	11/11/2018	1309	Myslate
Placement Orientation Program- II with soft skill phase	28/05/2018	927	Smart Traing Resources
Communication Language Lab	18/06/2018	1569	Internal Resources

BRIDGE COURSE -	17/08/2018	22	Internal Resources		
TAMIL MEDIUM AND VOCATIONAL Students					
<u>View File</u>					

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

Year	Name of the scheme	Number of benefited students for competitive examination	Number of benefited students by career counseling activities	Number of students who have passedin the comp. exam	Number of studentsp placed
2018	BEC(III YEAR)	1308	0	1225	0
2018	GRE/TOEFL/IE LTS/CAT/GATE /TANCET	207	0	135	0
2018	Placement Orientation (Final Year)	0	1022	0	823
2018	Product based training	0	250	0	241
2018	Aptitude tra ining(second year)	0	1274	0	0
2018	Advanced Java training (Third year)	0	1321	0	0
<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
9	9	10

5.2 - Student Progression

5.2.1 - Details of campus placement during the year

	On campus		Off campus		
Nameof organizations visited	ations students stduents placed		Nameof organizations visited	Number of students participated	Number of stduents placed
Infosys 58 17			SYNCFUSION Software	1	1
<u>View File</u>					

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

-						
	Year	Number of	Programme	Depratment	Name of	Name of
		students	graduated from	graduated from	institution joined	programme

	enrolling into higher education				admitted to	
2018	1	в.Е	CSE	UNIVERSITY OF MARYLAND	MS	
2018	2	B.E	CSE	SKEMA BUSINESS SCHOOL	MS	
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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			
CAT	9			
GATE	17			
GRE	23			
TOFEL	17			
Any Other	69			
<u>View File</u>				

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

Activity	Level	Number of Participants
Inter College Symposium - JETMECH(MECH)	National	482
<pre>Inter College Symposium - ETERNITE(IT)</pre>	National	322
Inter College Symposium - CRYPTRIX(CSE)	National	348
Intramural Sports - I Year	Intra	1046
Police Personnel Sports Meet at our Campus	State	150
10th St. Joseph's All India Ball Badminton Tournament	National	200
St. Joseph's International FIDE Rating CHESS tournament	National	500
CM Trophy Ball Badmiton	State	200
Intramural Sports - III Year	Intra	1417
Intramural Sports - II Year	Intra	1287
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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	National/	Number of	Number of	Student ID	Name of the
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	award/medal	Internaional	awards for Sports	awards for Cultural	number	student
2019	First Place All India Inter University Chess	National	1	0	3123171040 46	Chujeet Vignesh A
2018	Second Place South zone youth national Volley Ball champ ionship	National	1	0	3123171070 98	P.Pavithra
2019	New Guinness World Record Vel's University Baradham 5000	Internatio nal	0	1	3123161120 54	Supriya K
2018	First Place GE Healthcare Internatio nal Ltd Photo Contest	Internatio nal	0	1	3123152140 09	Annitha Na lanthamala r
2019	Second Place Madras Christian College Indian Dance	National	0	1	3123162050 27	Atshaya V
2019	Silver Medal Khelo India Athletic C hampionshi	Internatio nal	1	0	3123181141	S. Mani Raj
2019	Second Place Khelo India youth Games-50M Butterfly Swimming	Internatio nal	1	0	3123161030 35	CSB Prithviraj
2019	Third Place	National	1	0	3123186311 67	Subramania n V

	South-Zone Inter university VollyBall Tournament ,Kanpur					
2018	First Place All India Inter University Swimming	National	1	0	3123151061 16	M.S. Pavan Gupta
2018	First Place All India Inter University Chess	National	1	0	3123161140 09	S Ajay Krishna
<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:

670

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

0

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. Budget Preparation Principal is responsible for the preparation of the overall budget. The Budget planning for the year starts in the month of January. The Department heads and the administrative in- charges are instructed to plan the budget for the forthcoming year. They are invited to submit their carefully proposed budget for every academic year by the last week of February. The HOD instructs the Department in-charges to prepare the budget proposal for various activities like workshops, guest lectures, seminars, conferences, training, value added courses, professional body activities and industrial

visits etc. In addition to this the lab-in charges are also asked to come up with a proposal of their requirements for purchase of new equipment, repairs and maintenance, service, training and up gradation. The final budget proposal is prepared after scrutinizing at department level by the concerned heads. The administrative in - charges for placement, electrical, water, transport, mess, exam office, and civil works will also submit the proposal to the Principal. The budget proposal for the library is prepared by the librarian after consulting various departments. The budget proposal at the institutional and departmental levels is submitted to the Principal on or before 1st of March. The Principal then consolidates all the budget proposals received from the subordinates and organizes a meeting to eliminate redundancy. The modified proposed budget is forwarded to the Chairman for approval. The approved budget is then communicated to all heads and in-charges through proper channels. A monthly requirement form is submitted to the Principal every month along with the previous months expenditure. On the approval of the Principal and the Director, Accounts department releases the funds for the same. Through effective decentralization, the institution practices successful delegation and enhances the productivity of the college. This style of participative management ensures complete and constructive delivery of financial activities Practice 2 Students Activities The institution encourages students to participate in various national and international competitions. A systematic pattern is designed to select the students. The institution organises inter college symposiums every year. The encourages the students to exhibit their talents in both technical and co curricular activities. The smooth function of the event is facilitated by various committees (staff and students members). The activities are planned much ahead. The registration committee collects the data of the students interested in participating in the events. The online registration system helps students to register for different events. A unique number is assigned to every team registering for the event. The activity management committee design the rules and regulations for their respective activities and are responsible to the smooth conduct of the events. The event management committee takes the responsibility of the venue and acoustic requirement for each event online or offline, the committee is also responsible for the certificate and awards. The committee maintains the list of participants, trains them and encourages them to participate in different intercollegiate competitions. The staff coordinators mentor the students and help them to prepare proposals to participate in the competitions like

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):

Strategy Type	Details		
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 47,828 volumes of books and 125 national Journals apart from the 525 online journals from IEEE-IEL and Science direct and has a huge repository of NPTEL videos. The college also has access to MALIBNET and 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. The number of papers published by the faculty is 227. 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 9 patents

	out of which 1 patents and 1 copywright was granted .
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.
	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 on. 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.
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----.To understand the corporate working environment , 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, Muruggappa Group, GE Digital, Econ system ZOHO have offered internship to the students. The total number of internship offered are more than 100. Industrial visits are organised every semester to make students understand theory in practice expose students to of the corporate work environment. Activities are also organised by the students chapter of Google Club, Cognizant student club, coding club. 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 92.15 against

sanctioned intake.

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

Admission of Students

E-governace area	Details
Planning and Development	? 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	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. Theadmn communicates through SMS facility email id with parents, students and faculty. Biometrics software: 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.
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 need at 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 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.

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
2018	Dr.A.Chandra Sekar	Deep Learning	SRM Institute of Science and Technology	1000
2018	Dr.G.Mariakalav athy	Emotional Intelligence	Jayagovind Institute Of Technology	200
2018	Dr.S.Jothi	Deep Learning	SRM Institute of Science and Technology	1000
2018	Dr.J.T.Anita Rose	Recent Advancement In Artifical Intelligence And Machine Learning Techniques	S.A.Engineering College	750
2018	Dr.F Sangeetha Francelin Vinnarasi	Recent Advancement In Artifical Intelligence And Machine Learning Techniques	S.A.Engineering College	750
2018	Dr.R.Hemalatha	Artifical Intelligence Using Deep Learning And Machine Learning	National Institute of Technology	3540
2018	Dr.Jesline	Python For Data Science	Anna University ,Chennai	2200
2018	Dr.Jesline	Ethical Hacking And Cyber Security	AMET,Chennai	600

2018	Dr.Jesline	Machine Learning And Deep Learning	Anna University ,Chennai	1500
2018	Dr.A.Sheryl Oliver	Data Science With Python	IIT-Madras Research Park	3000
		<u>View File</u>		

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)
2018	FDP on "In troduction to Cloud I nfrastruct ure and Services"		10/10/2018	11/10/2018	25	0
2018	2 - Week FDTP on EC6801 - Wireless C ommunicati on		03/12/2018	15/12/2018	25	0
2018	Hands on Workshop on IoT and Drones		21/12/2018	22/12/2018	91	0
2018	Image Processing and Machine Learning using Python		07/03/2019	08/03/2019	80	0
2018	Embedded Systems in Healthcare Industry (VIPRA Technologies)		28/11/2018	30/11/2018	13	0
2018	AICTE-ISTE Sponsored Six Days I nduction/R efresher Programme On EMERGING TRENDS IN		02/07/2018	07/07/2018	43	0

	EMBEDDED SYSTEMS AND ITS REAL TIME APPLICATIO NS				
2018	NATIONAL LEVEL WORKSHOP ON POWER MANAGEMENT IN MICRO GRID SYSTEMS	24/08/2018	24/08/2018	22	0
2018	Anna University Approved FDTP on Design of Reinforced Concrete	29/05/2018	04/06/2018	25	0
2018	Role of AI IoT for Healthcare	04/02/2019	05/02/2019	32	0
2018	HR Conclave Meet Nurturing the students for industry readiness	23/07/2018	23/07/2018	200	0

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
Two Days FDP on "Introduction to Python"	1	02/11/2018	03/11/2018	2
National Workshop on "Geographical Information Systems"	3	15/10/2018	16/10/2018	2
Two Days FDP on "Emotional Intelligence"	3	26/10/2018	27/10/2018	2
Two Days FDP on "Introduction	3	19/07/2018	20/07/2018	2

to Mobile App Development"				
Two days National Seminar on "Role of AI and IoT for Health Care"	1	04/02/2019	05/02/2019	2
FDP on "Machine Learning and it's Applications"	2	19/12/2018	22/12/2018	4
FDP on "Deep Learning"	4	03/12/2018	04/12/2018	2
FDP on "Digital in Manufacturing with Real time Demos"	3	17/11/2018	17/11/2018	4
Two Days FDP on "Cloud Infrastructure and Services"	12	10/10/2018	11/10/2018	2
		<u>View File</u>		

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

Teac	hing	Non-te	aching
Permanent	Full Time	Permanent	Full Time
11	11	2	2

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 professional body membership fees ? Providing financial support to attend and present research papers in national level and 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

festivals ? Winter and summer vacations ? Free accommodation in hostel for out station employees ? Waiver of tuition fees in the Institution to the wards ? Free transport and mess facilities ? Cafeterias and Stores

tuition fees for sports students ? Training for IAS through St. Joseph's Civil Services Academy ? Training for Indian Armed Forces through St. Josephs Defense Academy

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: Our Institution conducts internal financial auditing periodically. We have a well-defined mechanism to inspect the usage of funds. The process of auditing starts with the budgetary preparation and there is well defined process for sanction of budget. The approved budget is communicated to all the department in-charges and administrative in-charges. Based on this, monthly budget is prepared by all the department and administrative in-charges. The Chairman monitors and reviews the expenditures of the Institution by conducting budget meeting. The budget meeting takes place last Monday of every month and in this meeting next month budget is presented and previous month expenses and balances are checked. The monitoring of expenditure against budget is regularly undertaken annually, where all department in-charges and administrative in-charges submit their annual expenditure statement during the month of January/February to the Principal and it is forwarded to the Chairman. 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 show 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
5 5		

IEEE (ECE)	2000	Cash award- No. of Societys Strength			
	<u>View File</u>				

6.4.3 - Total corpus fund generated

77740

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)

1. Guest Lectures St.Joseph's college of Engineering in association with PTA lay emphasis on making our students academically brilliant and team players..

The Benefits Are: • Students get to interact with successful industrial Experts • Getting to know insights about particular Business Models and Strategies. • Opens Opportunities for Collaborations and Internship 2.

Placement Activities The Placement Cell operates round the year to facilitate contacts between companies and graduates. The Roles played by PTA • To provide career guidance about avenues open after graduation • To help in organizing Pre- Placement Training. • Providing Training Placement process awareness to our students. • Planning and organizing various Placement drives on campus. 3.

NGO Activities Our Chairman desires for extending his support to the homes for the aged people, children suffering with cerebral palsy and orphanages, etc.

The Role Played by PTA • To identify and locate the Needy NGO's • Interacting with those NGO's to identify their real Needs • Disseminating the gathered information with our NGO Coordinators

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

1. Technical workshop to conduct lab 2. Refresher course on usage of software tools. 3. Personality development programme

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

Not Applicable

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
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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	
2018	FDTP on Design of Reinforced Concrete	28/05/2018	28/05/2018	04/06/2018	25	
	View File					

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
SPEECH - debate on Women Empowerment, conducted by IEEE Student Branch Chapter - Women in Engineering affinity group	24/09/2018	24/09/2018	20	2
TECH WIZARD - Technical Quiz for Women engineers conducted by IEEE Student Branch Chapter - Women in Engineering affinity group	12/03/2019	12/03/2019	25	3
Intramural Women Sports day - Inter Departmental Girls sports events	26/06/2018	28/06/2018	327	6

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

Percentage of power requirement of the University met by the renewable energy sources (Solar Energy Resources): 1.25

7.1.3 - Differently abled (Divyangjan) friendliness

Item facilities	Yes/No	Number of beneficiaries
Physical facilities	Yes	2

Provision for lift	Yes	2
Ramp/Rails	Yes	2
Rest Rooms	Yes	2
Scribes for examination	Yes	1
Special skill development for differently abled students	Yes	2
Any other similar facility	Yes	2

7.1.4 – Inclusion and Situatedness

7:1:1 111010010							
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
2018	0	9	29/06/201 8	3	Blood Donation activity through Y R C team	health and life saving through Blood donation	9
2018	27	0	15/06/201	1	Industry visits to IT companies	Campus situated in IT corridor Visits organised to IT company i nfrastruc ture awareness	1539
2018	1	1	08/02/201 9	1	Traffic Pollution awareness camp	IT corridor Traffic and air pollution curtailin g measure	57
2018	1	1	16/02/201 9	1	Traffic Pollution awareness camp	IT corridor Traffic and air pollution curtailin g measure	56
2018	0	118	23/06/201	1	Orphanage , Aged people and CP	Offering special lunch and needy	6136

					children Home visits	things, support to downtr odden	
2018	0	1	17/07/201	1	OSA Scien tific dem onstratio n	Kit Demon	59
2018	0	1	22/02/201	1	OSA Scien tific dem onstratio n	Kit Demon	57
2018	0	1	09/02/201	1	Computer programmi ng	Computer Skill dev elopment to Govt. School Students	14

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 Students	01/06/2018	The rules and regulations and its latest Amendments were discussed with students during the Semester Orientation program which was held on 2nd year: 20-06-2018 3rd year: 19-06-2018 4th year: 22-06-2018. 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.
Code of Conduct for Staffs	01/06/2018	The rules and regulations and its latest Amendments were discussed with staff members during the Semester beginning staff meeting which was held on 13-06-2018 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	01/06/2018	The Institutional Core values were discussed with students and staffs during the Semester Orientation program which was held on 2nd year: 20-06-2018 3rd year: 19-06-2018 4th year: 22-06-2018. 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.
Academic Calendar	01/06/2018	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	16/06/2018	16/06/2018	50
Onam Celebrations	18/08/2018	18/08/2018	45
Teachers day Celebrations	27/08/2018	05/09/2018	3285
Deepavali Celebrations	03/11/2018	03/11/2018	875
Christmas Celebrations	17/12/2018	17/12/2018	650
<u>View File</u>			

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

• Institute encourages non use of plastic in campus and creates awareness among students and staff. • Students were encouraged to use college bus instead of personal vehicle and bicycles in large number within the campus • Institute encourages Tree plantation activities. This activity helps in encouraging ecofriendly environment which provides pure oxygen within the institute. Dedicated workers are allotted for gardening and watering of all trees and plants. • The liquid waste generated from laboratories, urinals, etc., were treated inside the institute campus using sewage treatment plant. • A project 'Solar tree' is initiated by Department of EEE to motivate and enhance the 'Go Green' policy among students

7.2 - Best Practices

7.2.1 – Describe at least two institutional best practices

Best Practice 1 St. Joseph's Defence Officers Academy To aid those brave minds that are ready for greater sacrifices for the safety of our nation, our institution has inaugurated the "St. Josephs Defence Officers Academy" to prepare our students to proudly serve in the three services of the Indian Armed Forces. The academy fulfils the dreams of the student aspirants who are ready to join defence services and support the morals of the society effectively. St. Joseph's Defence Officers Academy functions with a vision of inculcating the foundations for discipline, dedication, responsibility, fierce competitiveness and maintence of physical and mental healthiness among its aspirants. It offers a free of cost training to all our registered students who aspire to be an efficient defence officer. The deserving aspirants were selected based on their scores of initial screening test and group discussions. The academy currently nurtures 113 defence trainees towards enhancing the traits of verbal ability, aptitude and general awareness to face various opportunities in all the Indian Army, Indian Navy, and Indian Air Force, the Indian Coast Guard and Paramilitary organizations etc. In addition, the academy organizes special seminars and workshops with the help of experts in the areas of in 'soft skills' to train the defence aspirants to think, feel and express like a Defence officer and to learn the ways of a disciplined life. These innovative practices and successful functioning of the academy ease the task of preparing defence services exams into an achievable goal to our students. Best Practice 2 Achievers day - a special recognition to winners The appropriate recognition and reward are the driving forces for any sustained achievements. Having understood the value of the motivation, every year our college celebrates a special event named "Achievers Day Celebrations" - a day dedicated to commemorate the student achievers of the institution. Achievers day is celebrated during the end of every academic year in the month of April, exclusively for the students who have brought laurels to our institution by

winning the prizes, honours and rewards. This year on 30th April 2019, this event was successfully conducted to honour 2708 Student achievers belonging to various categories such as winners in Sports and Games Teams, Inter-collegiate Paper presentations, Inter-collegiate Cultural Competitions, National and International level Symposiums and Conference presentations, Branch and Subject Toppers from each department, Blood donors from Youth Red Cross, Members of Tamil Mandram and Our College Student Orchestra Team. These achievers were honoured by distributing gifts worth of Rs. 11.13 lakhs and special certificates on this occasion. The event was made even more startling by our College Orchestra team and student's Dance Programs. This special function started with High Tea and ended with a splendid dinner. The year wise increase in number of achievers evidently proves that our innovative practice of this celebration imposes a positive motivation in the minds of our student community.

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/7.2%20Institutinal%20Best%20practice%20-%20Achieve r's%20Day%20Celebrations.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

The Advisory Bureau for Higher Studies (ABHS): The primary objective of St. Joseph's College of Engineering is the pursuit of Academic Excellence with high professional standards through continued education. In order to motivate the aspiring students to pursue higher studies and to excel themselves in eligibility test, a unique wing named 'Advisory Bureau for Higher Studies' (ABHS) is functioning since 1999 with the prime notion to serve the student community for getting higher studies admission in India and abroad. Advisory bureau for higher studies (ABHS) plays a significant role in sending the students to IITs, NITs and to abroad for higher studies. The bureau trains students for all qualifying exams, as well as Business English Certificate Courses for the last two decades so that they can explore in all the possible channels leading to a charismatic career. The main objective is to enable the students to prepare for tests such as GRE, TOEFL, GMAT, IELTS, GATE, CAT, etc. ABHS has the latest information regarding these exams. It also offers the Business English Certificate (BEC), a certification from Cambridge University is a skill based qualification in English for work. The students can access ABHS for getting information about various universities and courses they offer. The record of the alumni pursuing higher studies is well maintained in the ABHS. Our students have been a fruitful case study to anyone who dreams to learn in any noticeable institution abroad. During the 4 years of undergraduate engineering program, the interested students for pursuing higher studies can register as a member of ABHS in their second year onwards. The registered ABHS members can avail all the facilities available in the ABHS free of cost. In the beginning of every semester, an orientation session is being conducted to make them aware of the functioning and facilities of ABHS. ABHS has infrastructure of about 10 lakhs, which includes systems, books and CDs for taking-up above said examinations. About 1,150 books and 100 CDs are available for the access of the students. The students can avail on duty for attending the above mentioned tests as well as interviews related with higher studies. The record of the alumni pursuing higher studies is maintained in ABHS. The proof of admission obtained by the students in various universities is maintained. All information related with higher studies is also maintained separately. Currently 179 students are pursuing their higher studies at various

Universities in India and abroad. Students have got admission into topnotch

Universities in U.S, Europe, U.K, Canada, South Asia, Australia and IITs, IIMs, NITs by availing valuable guidance from our Advisory Bureau for Higher Studies (ABHS). Our students, nearly 1792 have done their MS and M.Tech in abroad and 568 acquired their P.G in our nation. These achievements have been made in the last decade between 2008 and 2018. Thus ABHS is a unique platform that strives to create meritorious personalities and to prepare professional, humane students to serve the humanity by setting a commendable tradition of initiatives.

Provide the weblink of the institution

https://stjosephs.ac.in/NAAC/7.2.1%20Institutional%20Best%20Practices%20-%20201 8-19.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, cocurricular and extracurricular activities, faculty development. In view of the Institution vision, mission and core values, Institution has planned for following initiatives. 1.. More Industry Institution collaborations has planned to bridge the gap between academia and industry. Industry being the major stake holder of technical institution. Continuous interaction is an essential requirement to enhance an employability of engineering graduates. 2. In order to enhance the interaction with the industries, Institution has planned to focus on interaction with industry with the involvement of every faculty through consultancies. Also, planned to firm up association with industry by signing MoU for formal collaboration. 3. In association with various industries, very good industrial exposure need to be provided to the students. More focus through interaction with industry will be to motivate students for industry sponsored projects, for industrial internships 4. Intensive training for preparing students for competitive examinations and National level Technical Competitions to showcase their talents and skills. 5. To promote innovation through skill development. Institution has developed "Institution's Innovation Council" planning for enhanced activities in this area. Skill development and innovation will be the focused area for enhancing employability of students.