



**Mahavir Education Trust's
Shah & Anchor Kutchhi Engineering College
Chembur, Mumbai 400 088**

**Internal Quality Assurance Cell
IQAC-SAKEC**



**Annual Quality Assurance Report
2018-2019**

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Part – A



Shah & Anchor Kutchhi Engineering College
Mahavir Education Trust Chowk,
W.T Patil Marg, Chembur,
Next to Duke's Company,

Mumbai, Maharashtra 400088

Website: <https://www.shahandanchor.com/home/>

DATA OF THE INSTITUTION

1. Name of the Institution: **Shah & Anchor Kutchhi Engineering College**

- Name of the Head of the institution : **Dr. Bhavesh Patel**
- Designation: **Principal**
- Does the institution function from own campus: **YES**
- Phone no./Alternate phone no.: **022 2558 0854**
- Mobile no.: **+91 9820021466**
- Registered e-mail: **principal@sakec.ac.in**
- Alternate e-mail : **bhavesh.patel@sakec.ac.in**
- Address : **Mahavir Education Trust's
Chowk, Waman Tukaram Patil
Marg, Next to Dukes Co.,
Chembur, Mumbai – 400 088.**
- City/Town : **Mumbai**
- State/UT : **Maharashtra**
- Pin Code : **400 088.**

2. Institutional status:

- Affiliated / Constituent: **Affiliated**
- Type of Institution: **Co-education**
- Location : Rural/Semi-urban/Urban: **Urban**
- Financial Status: **Self Financing.**
- Name of the Affiliating University: **University of Mumbai.**
- Name of the IQAC Co-ordinator : **Dr. Nilakshi Jain**
- Phone no. : **022 2558 0854**
- Alternate phone no.: **022 25568100**
- Mobile: **+91 9967039388**
- IQAC e-mail address: **iqac@sakec.ac.in**
- Alternate Email address: **nilakshi.jain@sakec.ac.in**

3. Website address: **<https://www.shahandanchor.com/>**

Web-link of the AQAR: (Previous Academic Year): **NA**

4. Whether Academic Calendar prepared during the year? **YES**

if yes, whether it is uploaded in the Institutional website: **YES**

Weblink: **<https://www.shahandanchor.com/home/academic-calendar/>**

5. Accreditation Details:

Cycle	Grade	CGPA	Year of Accreditation	Validity Period
1 st	Planning to Apply			
2 nd	NA	NA	NA	NA
3 rd	NA	NA	NA	NA

4 th	NA	NA	NA	NA
5 th	NA	NA	NA	NA

6. Date of Establishment of IQAC: **03/01/2019**

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
Establishment of Innovation Centre: The Institute has established innovation centre which is equipped with an AI based Idea Generation Software from InnovationNext	2018-2019	Staff and students of the college
Purchase and use of Urkund Plagiarism software	2018-2019	Staff and students of the college
Establishment of Research Cell	2018-2019	Staff and students of the college
8 national MoU's were signed.	2018-2019	11 projects were initiated and 173 interns for opportunity for internship.
Applied for Grants.	2018-19	Received grants for Rs. 170000
Students applied for Data Mining cup internationally.	2018-19	Received 1st rank in India and 50th rank internationally.
Celebration of Collaboration with Project Launch	2nd February 2019	173 interns working for projects
Internship on "System & Network Administration"	20/12/2018 to 29/12/2018	Six students are shortlisted for the industry internships.
STTP on Pedagogy for effective Integration of Information and communication Technologies in Engineering Institution	03/05/2018-08/05/2018.	Staff
Establishment of IIC 1.0:	6 th September 2017.	Staff and students of the college
Organization of one-week AICTE - ISTE Approved and Sponsored STTP, "Web Technologies - New Trends" by Computer Engineering Department.		
Conduction of a2E and Conduction of c2C: The access to Employability (a2E) and the Campus to Corporate (c2C), programs sponsored by Barclays, designed and delivered by Sri Sri Rural Development Program SSRDP	2018-2019	Staff and students of the college
Department of Computer Engineering organized Tech Conclave 'Pixel 2019'	2018-2019	Staff and students of the college

8 Final year Outhouse Projects in premier institutes like BARC, IIT, IDF, Intellysys Application Solution etc	2018-19	32 Students.
Internal ISO Audit conducted on External ISO Audit conducted on	14/02/2019, 12/03/2019	All Staff Members (Teaching & non-Teaching)
NPTEL Courses Spoken tutorial Workshops	2018-19	Staff and Students
NBA committee visit	12 th to 14 th April 2019	All Staff Members (Teaching & non-Teaching)

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

Institution/ Department/Faculty	Scheme	Funding agency	Year of award with duration	Amount
Faculty and Students	Minor Research Grant	Mumbai University	2018-19	Rs.170000.

9. Whether composition of IQAC as per latest NAAC guidelines: **Yes** (as per Revised Accreditation Framework in November, 2017)

10. No. of IQAC meetings held during the year: **02**

The minutes of IQAC meeting and compliance to the decisions have been uploaded on the institutional website: **Yes**

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)

- A number of MoUs were signed and students got the opportunity to work on live projects specifically for societal benefits
- SAKEC staff members received 5 minor research grants from Mumbai University because of the consistent efforts of the research cell.
- Established the Institution Innovation Council (IIC) which has been approved by the Ministry of HRD, Govt. of India.
- Teaching learning centre was established.
- Applied for NBA and Committee visited on 12th, 13th and 14th April 2019.

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

Plan of Action	Achievements/Outcomes
Establishment of Innovation Centre: The Institute has established innovation centre which is equipped with an AI based Idea Generation Software from InnovationNext, purchased for Rs. 5 Lacs.	The software was extensively used by the students. Apart from idea generation, it has several other features like talks, videos, e-books etc. which motivates and guides the users for creative problem solving. Students approach towards problem solving is changing. They are becoming aware that entrepreneurship is a better career option.
Purchase and Use of Urkund Plagiarism software	To encourage faculty and students to good quality publications
Research Cell Establishment	Dr. Nilakshi Jain initiated Research Activities in SAKEC in consultation with Principal Dr. Bhavesh Patel.
8 national MoU's were signed.	11 projects were initiated and 173 interns for opportunity for internship.
Applied for Grants	Received grants for Rs. 170000.
Students applied for Data Mining cup internationally	Received 1st rank in India and 50th rank internationally.
Students Initiated software	They became authors for GNUKhata.
Celebration of Collaboration with Project Launch	<p>Celebration of Collaboration with Project Launch 2nd Feb, 2019 SAKEC has collaborated with Indian Development Foundation, Bennett University, Roti Bank Mumbai, Bombay Leprosy Project (BLP), Waggy Tails Private Limited and Digital Freedom Foundation (DFF) to let students develop ideas and work on real life projects which have the potential to benefit the society in numerous ways. These projects were launched on 2nd February 2019, in the honorary presence of the Chief Guest, Mr. Boman Irani, widely acclaimed Indian actor. Mr. Irani was heartily welcomed and felicitated by the Chairman, Shri. Keshavjibhai Chhadva, Principal Dr. Bhavesh Patel and Research Coordinator Dr. Nilakshi Jain. Inspiring speech by Mr. Irani explaining the virtue of humility in one's life, left the audience in deep thoughts. Following 7 projects were launched:</p> <ul style="list-style-type: none"> - Roti Bank App - Roti Bank Test before Taste - IDF Web of Hope web application - IDF Speed Ambulance App - BLP Electronic Health Record Management System - IDF Fire Fighter Robot - IDF Breathe Clean Project

<p>ME BECOMES WE: Together to Build a Strong Nation - Leaders in Action –Celebration of Inspiration, Knowledge and Giving</p>	<p>Organized the event “MEBECOMES WE: Together to Build a Strong Nation” to celebrate the collaboration of SAKEC with IDF & Roti Bank Mumbai on 4th August 2018. The Event was graced by Dr. Narayan B. Iyer, CEO & National Co-ordinator (Mumbai) (IDF), Shri. D. Sivanandan IPS (Retd.), Former Director General of Police (Mentor and Founder of (Roti Bank Mumbai), Mr. Shashank Shetty Hon. Director (IDF) Education Projects & Project Lead (L&T Infotech), Ms. Shriya Kumar Strategy Advisor (Roti Bank Mumbai) & Derivatives Sales and Structuring (JPMorgan Chase), Mr. Amit Sarkar Project Manager – Social Responsibility (IDF), Mr. Bhavesh Adhia Social Ambassador (IDF) Robotics Education, Principal Dr. Bhavesh Patel (SAKEC), Vice Principal Dr. Vinit Kotak (SAKEC) The collaboration aims to blend Technology for the upliftment of the Society where the students and the faculty will be developing software and tools for IDF and Roti Bank so as to help these organizations reach out to more humanitarian causes and create awareness of the same among the people. SAKEC also feels pride in being associated with these organizations and pledges to support their endeavors. We at SAKEC also look forward to our commitment towards Social Responsibility through this collaboration.</p>
<p>Diving into Deep Learning</p>	<p>Students and faculties of SAKEC got an opportunity of Diving into Deep Learning on 1st and 2nd September of 2018. The hands-on sessions were conducted under the umbrella of ME becomes WE: Together to build a Strong Nation by Dr. Kranti Ghag, Ms. Jalpa Mehta, Mr. Milind Khairnar and Ms. Vaishali Hirlerkar. On the last day of event online quiz was conducted and Rohit Mutalik secured first place with 20/20 marks and Poojan Sanghvi stood second with 19/20 marks. Both were appreciated with mementos. Focused group of students and faculty members participated and also expressed that such events should be conducted often. Feedback inspired us to take this journey ahead and special Interest Group on AI and Deep Learning was initiated.</p>
<p>Student Leadership Program by IDF</p>	<p>"Student Leadership Program by Indian Development Foundation " was conducted on 19th September 2018 at SAKEC under the umbrella of "ME becomes WE - together to build a strong Nation". We had excellent speakers, Ms. Mallika Ramchandran and Mr. Roshan D'souza from IDF Indian Development Foundation</p>

	<p>who are experienced SLP coordinators. The coordinators conducted the session for our students on how they can become mentors and help IDF and thus the nation, in achieving their goal of teaching the underprivileged children. The session was truly inspiring as the students were looking forward to get real time exposure of mentoring. The speakers also assured the students that this would be a life-changing experience for them to give back to the society and lead a successful, satisfying and happy life in true sense. The session was appreciated by the students who thanked the speakers as well as college and faculty for conducting such a diverse session for them. Speakers were given positive assurance about SAKEC's collaboration with IDF which will bear sweet results to build a strong society and Nation.</p>
<p>Student Leadership Program at Anjuman Islam School</p>	<p>Student Leadership Program was a six-day program where students of Anjuman Islam School Bandra were taught topics like Time Management, Anger Management, Public Speaking, Good company & Bad company, Career guidance, Community Hygiene etc, by mentors of SAKEC. Total of 27 mentors were involved in the mentorship.</p>
<p>8 national MoU's were signed.</p>	<p>11 projects were initiated and 173 interns for opportunity for internship.</p>
<p>Internship on "System & Network Administration"</p>	<p>This internship program was organized from 20/12/2018 to 29/12/2018. The internship aimed at giving Hands On training to the students. Students were given an opportunity to learn and do system administration and work on live projects. On successful completion, the participants were awarded with an Internship certificate. Six students are shortlisted for the industry internships starting from 31st December 2018.</p>
<p>STTP on Pedagogy for effective Integration of Information and communication Technologies in Engineering Institution</p>	<p>Department of Electronics Engineering has organized an AICTE ISTE approved STTP on "Pedagogy for Effective Integration of Information and Communication Technologies in Engineering Institution" from 03/05/2018-08/05/2018. This course provided insight and hands-on experience to Engineering faculty in implementing student-centered integration of ICT for effective learning. The course was designed and conducted by the Educational Technology Department of IIT Bombay and hence has a very authentic course structure.</p>
<p>Establishment of IIC 1.0: The institute received IIC 1.0 from</p>	<p>By establishing IIC 1.0 the efforts for promotion of innovation and entrepreneurial culture became well</p>

MHRD's Innovation Cell. IIC 1.0 conducted several events as per the guidelines laid by MHRD's Innovation Cell received maximum rating at the end.	organised.
Organization of one-week AICTE - ISTE Approved and Sponsored STTP, "Web Technologies - New Trends" by Computer Engineering Department.	The conduction of STTP resulted in a great learning experience for the participants. The participants got to learn the latest technologies required for developing web applications. The Keynote speech by Mr Achyut Godbole, renowned author gave several valuable insights of the subject.
Internships: The efforts for extending good internship opportunities to the students were intensified.	The efforts resulted in a significant rise in the number of students going for internships. In the survey done by Internshala, the Institute received the 31st rank in 1800+ Institutions.
Conduction of a2E: The access to Employability (a2E), a program sponsored by Barclays, designed and delivered by Sri Sri Rural Development Program SSRDP was conducted to prepare the students for their campus recruitment programs.	The program covered interview skills, group discussion, personality development, stress management, overcoming shyness, nervousness, team building etc. The program was enjoyed and greatly appreciated by the students and made them confidently go through the campus recruitment process.
Conduction of c2C: The Campus to Corporate (c2C) , a program sponsored by Barclays, designed and delivered by Sri Sri Rural Development Program SSRDP was conducted to prepare the students for rigorous and challenging life in corporate they are going to work after their education.	The program conducted several aspects like team building, soft skills, etiquettes, communication skills, emotional intelligence etc. of the corporate environment in which the students have to work after their studies. The program was activity based and students greatly appreciated the program for grooming them with very essential skills.
CSR activity Beach Cleanup organized by ACM on 26th January, 2019	1.Understand the issues of society 2. Work for Society
CSRA -Gaushala visit organized by ACM on 31-Aug-2019	To showcase the students the importance of cows in our natural ecosystem and also how much the importance they have on our lives

14. Whether the AQAR was placed before statutory body? : **No**

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: **2018-2019**

Date of Submission: **9th January 2019**

17. Does the Institution have Management Information System? : **Yes**

Module	Implementation
Administration	Implemented successfully from 2002. Periodical up gradations as per the requirement.
Finance and Accounts	Implemented successfully from 2002. Modifications are taken place every now and then as per the accounts department's requirement.
Student Admission and Support	From 2002 onwards. Up gradations as and when required. V.1. From 2002 to 2005 V2. From 2006-2011 V.3. From 2012-2018
Examination	Upgraded Software made in 2002. 2010 (V.1) 2012 (V.2) CBGS R-2012 2016 (V.3) Choice based R-2016.

Part-B

CRITERION I – CURRICULAR ASPECTS

1.1 Curriculum Planning and Implementation

Shah and Anchor Kutchhi Engineering College, Chembur, is affiliated to the University of Mumbai and follows the curriculum as designed by the University of Mumbai. Curriculum comprises subjects for all four years of the Bachelor of Engineering program.

The academic dean prepares the academic calendar, at the start of semester by discussing with principal and respective departmental HOD's. The subject preferences are collected from faculty at the end of the previous semester so that staff can get sufficient time for the preparation of the course and accordingly subjects are being allocated. The HOD's of respective departments conduct a course commencement meeting and distribute the overall semester work to faculty. For every subject the course in-charges are made who is responsible for maintaining documents related to the course. The respective course in-charges for the course generates course outcomes (CO) and assigns weight-age to CO's. Various assessment methods required are also identified and weight-ages are assigned to them for course outcome attainment.

The timely execution of lectures and lab in accordance with predefined planning is monitored by domain in-charge and HOD on a regular basis. The lecture and lab planning and execution is reflected in the faculty diary which is checked by senior faculty. The exam co-ordinators are appointed by the HOD's for smooth conduction of internal assessment which is conducted twice during semester. The internal assessment papers are conducted timely as per university norms. The assessed papers are shown to the students. For the weaker students guidance and remedial classes are conducted.

The institute ensures that the academic and industrial gap in the curriculum is identified through inputs of the Departmental Advisory Board (DAB) committee and departmental faculties. For gap's identified faculty conduct activities beyond syllabus ensuring students are up to date with latest advances in the technology.

Projects of final year students are decided by doing project review by the project review committee formed by the project co-ordinator. After literature review the title of the project is finalized by a review committee and project guide is allocated to the group based on specialization of the faculty.

The senior faculty members monitor the lectures and if any suggestions for improvement are done by them to the faculty. Faculties utilizes various innovative teaching learning methods during the lecture such as, 'Think-Pair-Share', 'Flip Classroom' for making the students to think beyond the scope of the subject and apply the techniques to the real world applications.

Every semester internal audit is conducted by the ISO audit committee and its details are shared to all faculty members by HOD, which helps in improvement with the academic process. External ISO audit is done by RINA once in a year.

Mentoring system is also implemented in the institute. The department allocates mentors to a group of 20 students who guide them for 4 years of their graduation. The mentor conducts meeting and counsels the mentees and parents regularly.

LMC's (Local Management Committee) reviews the progress of the entire college for the semester and gives suggestions to improve the academics.

Institute encourages various student bodies associated with IEEE, IETE, ACM, ISTE, CSI, etc. to conduct various events such as workshops, guest lectures and industrial visits which help in the overall growth of students in the field of engineering. Students are also encouraged for national and international competitions and Smart India Hackathon.

1.1.2 Certificate/ Diploma Courses introduced during the Academic year

Name of the Certificate Course	Name of the Diploma Courses	Date of introduction and duration	focus on employability/ entrepreneurship	Skill development
SPOKEN	-	2018-2019	Focus on Employability	Knowledge related to course opted

1.2 Academic Flexibility

1.2.1 New programmes/courses introduced during the Academic year

Programme with Code	Date of Introduction	Course with Code	Date of Introduction
Computer Engineering	2018-2019	Database Management System	9 th July 2018
Computer Engineering	2018-2019	Theory of Computer Science	9 th July 2018
Computer Engineering	2018-2019	Advanced Operating System	9 th July 2018
Computer Engineering	2018-2019	Advanced Algorithm	9 th July 2018
Computer Engineering	2018-2019	Microprocessor Lab	9 th July 2018
Computer Engineering	2018-2019	Computer Network Lab	9 th July 2018
Computer Engineering	2018-2019	Database & Info. System Lab	9 th July 2018
Computer Engineering	2018-2019	Web Design Lab	9 th July 2018
Computer Engineering	2018-2019	Data warehousing and Mining	7 th January 2019
Computer Engineering	2018-2019	Cryptography & System Security	7 th January 2019
Computer Engineering	2018-2019	Mini Project	7 th January 2019
Computer Engineering	2018-2019	Machine Learning	7 th January 2019
Computer Engineering	2018-2019	Advanced Computer Network	7 th January 2019
Computer Engineering	2018-2019	Software Engineering Lab	7 th January 2019
Computer Engineering	2018-2019	System software Lab	7 th January 2019
Computer Engineering	2018-2019	Data Warehousing & Mining Lab	7 th January 2019
Computer Engineering	2018-2019	System Security Lab	7 th January 2019
Information Technology	2018-2019	Microcontroller and Embedded Programming	9 th July 2018
Information Technology	2018-2019	Internet Programming	9 th July 2018
Information Technology	2018-2019	Advanced Data Management Technology	9 th July 2018
Information Technology	2018-2019	Cryptography & Network Security	9 th July 2018
Information Technology	2018-2019	Advanced Data	9 th July 2018

		Structures & Analysis of Algorithms	
Information Technology	2018-2019	E-Commerce & E-Business	9 th July 2018
Information Technology	2018-2019	Computer Graphics & Virtual Reality	9 th July 2018
Information Technology	2018-2019	Internet Programming Lab	9 th July 2018
Information Technology	2018-2019	Security Lab	9 th July 2018
Information Technology	2018-2019	OLAP Lab	9 th July 2018
Information Technology	2018-2019	IOT (Mini Project) Lab	9 th July 2018
Information Technology	2018-2019	Software Engineering with Project Management	7 th January 2019
Information Technology	2018-2019	Cloud Computing & Services	7 th January 2019
Information Technology	2018-2019	Wireless Networks	7 th January 2019
Information Technology	2018-2019	Digital Forensics	7 th January 2019
Information Technology	2018-2019	Green IT	7 th January 2019
Information Technology	2018-2019	Software Design Lab	7 th January 2019
Information Technology	2018-2019	Business Intelligence Lab	7 th January 2019
Information Technology	2018-2019	Cloud Service Design Lab	7 th January 2019
Information Technology	2018-2019	Sensor Network Lab	7 th January 2019
Information Technology	2018-2019	Mini-Project	7 th January 2019
Electronics Engineering	2018-2019	Database Management System	9 th July 2018
Electronics Engineering	2018-2019	Embedded And Rtos	7 th January 2019
Electronics Engineering	2018-2019	Electronics Product Design	7 th January 2019
Electronics Engineering	2018-2019	Wireless Communication	7 th January 2019
Electronics Engineering	2018-2019	Computer Organization & Architecture	7 th January 2019
Electronics and Telecommunication Engineering	2018-2019	Microprocessor & Peripherals Interfacing	9 th July 2018
Electronics and Telecommunication Engineering	2018-2019	Digital Communication	9 th July 2018
Electronics and Telecommunication Engineering	2018-2019	Electromagnetic Engineering	9 th July 2018
Electronics and Telecommunication Engineering	2018-2019	Discrete Time Signal Processing	9 th July 2018
Electronics and Telecommunication Engineering	2018-2019	TV & Video Engineering	9 th July 2018

Electronics and Telecommunication Engineering	2018-2019	Data Compression and Encryption	9 th July 2018
Electronics and Telecommunication Engineering	2018-2019	Microprocessor & Peripherals Interfacing Lab	9 th July 2018
Electronics and Telecommunication Engineering	2018-2019	Digital Communication Lab	9 th July 2018
Electronics and Telecommunication Engineering	2018-2019	Business Communication & Ethics Lab	9 th July 2018
Electronics and Telecommunication Engineering	2018-2019	Open Source Technology for Communication Lab	9 th July 2018
Electronics and Telecommunication Engineering	2018-2019	TV & Video Engineering Lab	9 th July 2018
Electronics and Telecommunication Engineering	2018-2019	Data Compression and Encryption Lab	9 th July 2018
Electronics and Telecommunication Engineering	2018-2019	Microcontrollers & Applications	7 th January 2019
Electronics and Telecommunication Engineering	2018-2019	Computer Communication Networks	7 th January 2019
Electronics and Telecommunication Engineering	2018-2019	Antenna & Radio Wave Propagation	7 th January 2019
Electronics and Telecommunication Engineering	2018-2019	Image Processing and Machine Vision	7 th January 2019
Electronics and Telecommunication Engineering	2018-2019	Radar Engineering	7 th January 2019
Electronics and Telecommunication Engineering	2018-2019	Database Management System	7 th January 2019
Electronics and Telecommunication Engineering	2018-2019	Microcontroller & Applications Lab	7 th January 2019
Electronics and Telecommunication Engineering	2018-2019	Computer Communication Network Lab	7 th January 2019
Electronics and Telecommunication Engineering	2018-2019	Antenna & Radio Wave Propagation Lab	7 th January 2019
Electronics and Telecommunication	2018-2019	Image Processing and Machine Vision Lab	7 th January 2019

Engineering			
Electronics and Telecommunication Engineering	2018-2019	Radar Engineering Lab	7 th January 2019
Electronics and Telecommunication Engineering	2018-2019	Database Management System Lab	7 th January 2019

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	UG	PG	Date of implementation of CBCS / Elective Course System	UG	PG
TE (Computer Engineering)	UG	--	July 2018	UG	--
TE (Information Technology)	UG	--	July 2018	UG	--
TE (Electronics Engineering)	UG	--	July 2018	UG	--
TE (Electronic and Telecommunication Engineering)	UG	--	July 2018	UG	--

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

No of Students	Certificate	Diploma Courses
Registered: 1350 Certificate: 1100	SPOKEN	--

1.3 Curriculum Enrichment

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

Value added courses	Date of introduction	Number of students enrolled
Python Web Frameworks (IT)	19 th January 2019	31
Machine Learning Tools	6 th February 2019	18
SEMICODE	20 th February 2019	42
Presentation Skills	13 th March 2019	200
Hands on GitHub	27 th March 2019	21
Aptitude Training	19 th June 2018	246
Python Programming: Learn It	4 th July- 6 th July 2018	46

Well		
Workshop on "Application server configuration in LINUX" by CSI in collaboration with Computer Department	18 th July 2018	22
IT industry Trends and Planning IT career	20 th July 2018	147
Internet-of-Things (IoT)	21 st July- 22 nd July 2018	88
Hands on session on Python: Cppgemini	25 th July 2018	87
ISTE in collaboration with computer dept. on "MATLAB"	1 st August 2018	14
Student Development Programme on Softskills	1 st August 2018	168
ACM in collaboration with computer Dept. on "Hands on PHP"	4 th August 2018	31
Workshop on "IONIC Framework" by CSI in collaboration with Computer Department	4 th August 2018	35
Data Mining Using Orange	4 th August 2018	43
Career Guidance session	8 th August 2018	213
Workshop on "Tensorflow Framework for Mining" by CSI in collaboration with Computer Department	11 th August 2018	30
Workshop on on Attack & Security in Cyber Era by CSI in collaboration with Computer Department	1 st September 2018	41
Arduino Workshop	1 st September 2018	
Music Production With FL Studio	8 th September 2018	29
Introduction to Arduino	19 th September 2018	25
VHDL	22 nd September 2018	36
Institutional Training Program by PCRA (Petroleum Conservation Research Association)	28 th September 2018	41
Relational model redesign	29 th September 2018	31
MATLAB	3 rd October 2018	10
Introduction to Latex	3 rd October 2018	2
Linux From Networking Perspective	6 th October 2018	27
Coding With JAVA	6 th October 2018	44
Campus to Corporate (c2C)	8 th -10 th October 2018	106
Access to Employability	22 nd -24 th October 2018	300

1.3.2 Field Projects / Internships under taken during the year

Project/Programme Title	No. of students enrolled for Field Projects / Internships
Internship at Centre for Creative Learning, IIT Gandhinagar	03
IDF Projects <ul style="list-style-type: none"> • Web of Hope • Speed Ambulance • Fire Fighter • Breathe Clean 	26
Roti Bank Projects <ul style="list-style-type: none"> • Zero Hunger • Test Before Taste 	23
BLP Project: Electronics Health Record Management System	9
DFE	9
Supertech Instrumentation Services (I) Pvt. Ltd.: SISPL Project	4
Happy Bubbles	9
Waggy Tails Project: Let it Wag	6
Waggy Tails Internship	25
Research Cell Project : Website	3
Research Cell Intership	68
H.O.D.E. R	04
BARC - Digital Controller for a Three-phase Thyristor based Converters	3
BARC - Piezo Shifter- Loop designing for isotope ratio in infra-red spectroscopy	4
Computer: Internship	48
Electronics: Internship	140
EXTC: Internship	30
IT: Internship	47
Total Internship	461

1.4 Feedback System

1.4.1 Whether structured feedback received from all the stakeholders.

1) Students	2) Teachers	3) Employers	4) Alumni	5) Parents
Yes	Yes	Yes	Yes	Yes

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

The institute collects various feedback for the overall improvement in terms of quality education, infrastructure, well equipped laboratory and professional standards to attain the vision and mission of the institute.

The various feedback forms, for students, teachers, alumni and parents are designed by HOD's, Program Co-ordinator and team of senior faculty members.

Students give feedback to faculty regarding the teaching of faculty in the classroom considering various parameters such as subject clarity, communication, speed delivery, discipline, etc. The faculty feedback is later analysed by HOD and corrective measures to be taken are informed to the respective faculty member. The faculty receiving excellent feedback are appreciated at departmental level whereas faculty with poor feedback has to provide justification to the head of department and corrective measures are discussed to improve the performance and it is also monitored by HOD.

The students also provide course exit, laboratory exit feedback which are designed by course in-charge and subject faculty members. The course and laboratory exit feedback basically comprises of feedback related to overall understanding of the subject by the student. The course and laboratory feedback so collected is analysed and informed to the course in-charge and also the analysed feedback is used for overall course attainment under indirect method of assessment. The co-curricular and extra-curricular feedback are collected from the students who participate in various co-curricular and extra co-curricular activities throughout the year. The feedback basically covers questionnaire related to what skills student learnt by participating in the event. The feedback is analysed and informed to HOD and Program Co-ordinator. These feedbacks contribute towards course and indirect method attainment.

The facility feedback is collected from final year students regarding infrastructure, Gymkhana, Library, Canteen and the analysed report is informed to higher authorities for taking necessary action. The final year students also provide program exit feedback.

The teacher feedback is collected from the teacher regarding the course and curriculum implemented. The feedback is analysed and any corrective actions which can be implemented at department or institute level as per given suggestions are considered.

The parent's feedback is collected during the Parent-Teacher meeting which is arranged regularly in every semester for informing the progress of their ward. After meeting the parents provide feedback for various college facilities and teaching methods. The feedback is analysed and corrective measures are taken by HOD and Higher authorities.

The Alumni feedback is also collected during alumni meet and analysed by Alumni Co-ordinator and accordingly suggestions such as bridging the gap between industries and academic, extra & co-curricular activities, etc. put forward by the alumni are considered for improvement.

The Employee feedback is collected from employers wherein the employers provide the expectation of industry from the students. The employees also help to identify the areas wherein the institute can help in overall development of students and make them market ready. The overall collected feedback is analysed by the placement co-ordinator and all necessary actions such as, planning some events for student improvement are conducted.

CRITERION II -TEACHING-LEARNING AND EVALUATION

2.1 Student Enrolment and Profile

2.1. 1 Demand Ratio during the year

Name of the Programme		Number of seats available	Number of applications received	Students Enrolled
Computer Engineering	First Year Engineering	120	512	126

	Direct Second Year, (Separate Division)	60	317 (Institute level)+ 107 (Against CAP) + 88 (DSE)	63
	Direct Second Year (Lateral Entry)	24		24
	Master of Engineering	18		0
Information Technology	First Year Engineering	120		125
	Direct Second Year (Lateral Entry)	24		24
	Master of Engineering	18		1
Electronics and Telecommunication Engineering	First Year Engineering	60		35
	Direct Second Year Direct Second Year (Lateral Entry)	12		35 *
Electronics Engineering	First Year Engineering	120		44
	Direct Second Year (Lateral Entry)	24	09	
	Master of Engineering	18	1	

*Number of students filled are more as seats are filled against vacancy generated in first year and it is as per DTE norms.

2.2 Catering to Student Diversity

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

Total = (Computer Engineering + Information Technology + Electronics and Telecommunication Engineering + Electronics Engineering +FE)

Year	Number of students enrolled in the institution (UG)		Number of students enrolled in the institution (PG)		Number of full time teachers available in the institution teaching only UG courses	Number of full time teachers available in the institution teaching only PG courses	Number of teachers teaching both UG and PG courses
	FE	SE	FE	SE			
2018 -19	FE	330 (126+125+35+44)	FE	02 (00+01+00 +01)	123 (41+25+14 +20+23)	00 (00+00+00 +00+00)	12 (01+05+00+0 6+00)
	SE	493 [(152+63)+143+72 +63]	SE	06 (01+02+00 +03)			
	TE	516 [(145+67)+142+69 +93]	SE	06 (01+02+00 +03)			

	BE	598 [(158+60)+151+79 +150]				
--	----	---	--	--	--	--

2.3 Teaching - Learning Process

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

Number of teachers on roll	Number of teachers using ICT (<i>LMS, e-Resources</i>)	ICT tools and resources available	Number of ICT enabled classrooms	Number of smart classrooms	E-resources and techniques used
140 (45+30+15+29+21)	132 (45+30+15+29+13)	LCD Projector, Computer, Projector, Smart Board, Microsoft Surface pro, Audio Video enabled classrooms, Digital Library, Urkund Anti Plagiarism tool, Internet Facility, use PPT, Videos,	23 (09+07+03+04+00)	10 (06+04+00+00+00)	E-resources: <ol style="list-style-type: none"> i. Digital Library, ii. Spoken Tutorials, iii. E-books iv. Subscription of E-journals, v. NPTEL, vi. Video Repository, vii. Power points, videos , viii. Study material Techniques : <ol style="list-style-type: none"> i. Think-Pair-Share (TPS), ii. Flip Classroom

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

Institute has a well-defined policy of mentoring the students enrolled in the institution. The students are from various socio-economical backgrounds and different regions. The newly admitted students face many emotional, behavioural, and language challenges along with the studies during the first few

months of their stay in the institute. They do not have clear idea about the career opportunity available after completion of graduation in their mind. Hence, students need mentoring to gain confidence of facing such challenges and continue the career stress free.

Institute-level mentoring

1. On the very first day, institute organizes orientation program to welcome the newly admitted students and to make them familiar with the new education environment. First, principal of the institute addresses the students by giving them the basic information about the institute, various courses conducted in the institute with their relevance in the industry, the requirements of the national and international community and various career opportunities after completion of graduation, rules and regulation of the institute, exam system, and the evaluation system. Next, the head of the departments also briefs them about their respective departments, curriculum, laboratories, major projects, and research facilities available.
2. Institute organizes the student induction program with duration of two weeks in the first semester.
3. One first year faculty is assigned as mentor to approximately 15-20 newly admitted students to help them to overcome the challenges. Professional counsellor is also available in the institute. So, students are suggested to meet the counsellor also, if required.

Department-level mentoring

1. In second year, one teaching faculty is assigned to each 15-20 students by the department as a mentor who mentors them for the next three years that is till they become graduate.
2. Mentors maintain the record file of every mentee which is updated bimonthly and maintained till 3 years after his/her graduation. The mentee record file contains students' detailed information like parent's/guardian's name, address, contact numbers, academic details, undertaking form, anti-ragging affidavit.
3. Mentors conduct meeting fortnightly in which mentees can discuss about their problem with the mentor. They are encouraged to participate in curricular, co-curricular, extra-curricular and social activities. Mentor maintains the attendance and minutes of meeting in the record file.
4. Mentees are free to communicate with the mentor through mobile,Whatsapp group, emails. Mentor recognizes mentee as an individual with a personal life and values them as a person, listens to mentee's career concerns and responds appropriately.
5. Parent-mentor meetings are conducted by bringing parents into the mentoring system as key stakeholders to create an environment for open interaction and reflection not only with the mentee but with his/her parents too. Mentors discuss about the progress report of the mentee or any other issue with their parents.
6. Department is providing facility of Language lab(English) in which students are given exclusive training in communication skill.
7. Placement cell conducts the aptitude training and motivational talks regularly. Hands-On workshop, industrial visits are being arranged by the department for the overall development of the students

Number of students enrolled in the institution	Number of full time teachers	Mentor: Mentee Ratio
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18.18

2.4 Teacher Profile and Quality

2.4.1 Number of full time teachers appointed during the year

Name of the program	No. of sanctioned positions		No. of filled positions	Vacant positions	Positions filled during the current year	No. of faculty with Ph.D.
FE	Professor	28	01	5	00	07
	Associate Professor		07		00	
	Assistant Professor		15		00	
Computer Engineering	Professor	5	01	4	00	02
	Associate Professor	10	04	6	00	
	Assistant Professor	29	37	-	04	
Information Technology	Professor	3	00	3	00	02
	Associate Professor	7	03	4	00	
	Assistant Professor	21	27	-	03	
Electronics and Telecommunication	Professor	1	-	1	-	00
	Associate Professor	3	-	3	-	

Engineering	Assistant Professor	10	14	-	-	
Electronics Engineering	Professor	3	1	0	2	03
	Associate Professor	7	6	0	1	
	Assistant Professor	21	19	0	2	

2.4.2 Honours and recognitions 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
2018-19	Institute Award		2 star Certified Institution Innovation Council (IIC) Cell
	Institute Award		Academy of the year from PriarTechnoworld
	Dr. Bhavesh Patel	Principal	Education Leadership Award
	Dr. Kranti Ghag	Assistant Professor	Mentor of the Team Held 1st position in INDIA in DATA MINING CUP International Student Competition
	Mr. Lukesh Kadu	Assistant Professor	Appreciated for spreading awareness of Spoken tutorial IIT Bombay
	Ms. Pranali Wagh	Assistant Professor	Active SPOC For NPTEL Award

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 semester-end/
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				year- end examination
Computer Engineering	1T01821	I	27/12/2018	11/03/2019
	1T00723	III	17/12/2018	12/01/2019
	1T00725	V	12/12/2018	12/01/2019
	1T00717	VII	10/12/2018	18/02/2019
	1T01822	II	07/06/2019	17/07/2019
	1T00724	IV	29/05/2019	17/07/2019
	1T00726	VI	03/06/2019	08/07/2019
	1T00718	VIII	24/05/2019	08/07/2019
Information Technology	1T03011	I	27/12/2018	11/03/2019
	1T01223	III	17/12/2018	12/01/2019
	1T01225	V	12/12/2018	12/01/2019
	1T01217	VII	14/12/2018	06/03/2019
	1T01822	II	07/06/2019	17/07/2019
	1T01224	IV	29/05/2019	02/07/2019
	1T01226	VI	03/06/2019	03/07/2019
	1T01218	VIII	24/05/2019	12/07/2019
Electronics and Telecommunication Engineering	1T01821	I	27/12/2018	11/03/2019
	1T01023	III	17/12/2018	15/01/2019
	1T01025	V	12/12/2018	15/01/2019
	1T01017	VII	14/12/2018	06/03/2019
	1T01822	II	07/06/2019	17/07/2019
	1T01024	IV	29/05/2019	20/07/2019
	1T01026	VI	03/06/2019	27/07/2019
	1T01018	VIII	24/05/2019	06/07/2019
Electronics Engineering	1T01821	I	27/12/2018	11/03/2019
	1T01823	III	17/12/2018	14/01/2019
	1T01825	V	12/12/2018	01/02/2019
	1T01827	VII	12/12/2018	01/02/2019
	1T01822	II	07/06/2019	17/07/2019
	1T01824	IV	29/05/2019	20/07/2019
	1T01826	VI	10/06/2019	20/07/2019
	1T01828	VIII	26/05/2019	12/07/2019

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

Each student's performance is evaluated through various modes of assessment which is explained below:

➤ **Internal Assessment (IA)**

- **Notification:** IA is scheduled two times in every semester as per the academic calendar and it

is notified to students through multiple modes like website, student portal, and notification on notice board.

- **IA syllabus declaration:** IA syllabus is declared two weeks prior the IA schedule and the important questions are discussed during the lecture for practice.

- **Confidentiality:** Two sets of IA question paper are prepared at the examination centre and submitted to Exam-in-charge who randomly selects one paper and make required number of copies in order to conduct the IA exam.

- **Fairness:** Subject teachers prepare the model solution and marking scheme and assess the answer book accordingly. The assessed answer books are shown to the students as per the academic calendar. Average of two IA marks is considered as the final IA marks.

➤ **Centralised Assessment Process (CAP):** Assessment of answer books of end-semester examination is carried out within seven days from the date of the examination.

➤ **Term work:** Students complete their experiments as per the practical planning and the assessment is being carried out immediately.

➤ **Final year project:** Review of each project is carried out by the experts from the same domain periodically to improve the quality of the project.

➤ **Lecture:** In lecture, students are assessed by conducting periodic quizzes, assignments, TPS/PI activities etc. Lecture monitoring is done in every semester by senior faculties.

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

The Academic calendar of the Institute is designed based on the academic calendar of the Mumbai University. The calendar has time frame for all activities throughout the semester as decided by the institute.

Each activity is carried out through Planning, dissemination, implementation and monitoring which ensure its adherence to Academic Calendar.

1. Planning:

Few important highlights of the academic calendar are as follows:

1. Commencement of the term and term end
2. Submission of lecture Planning/List of Experiments/ Assignments
3. List of mentors and class teachers
4. Meeting of HODs with mentors and Batch Representatives, Parent teacher meeting, mentor-mentee meeting
5. ISO audit.
6. Attendance record of students
7. Internal assessment(IA) test I & II for FE, SE, TE, BE, ME, declaration of IA results, remedial classes for weak students
8. Students feedback

9. BE project review
10. Oral/practical examination for
11. Commencement of theory exam
12. Holidays, College Festivals

2. Dissemination:

Dissemination of each activity is carried out by publishing the academic calendar at the beginning of every semester through website.

3. Execution:

1. Lecture and practical planning is carried out for timely completion of the course.
2. Term work Evaluation is carried out weekly through lab performance and journal assessments.
3. Attendance is taken during every lecture / practical in order to display attendance record.
4. Display of course wise IA syllabus, IA timetable, declaration of IA result is carried out as per the academic calendar.

4. Monitoring

Compliance of various activities is monitored by the Departmental Academic Coordinators during department meeting.

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 web link)

Programme Name	Weblink
Computer Engineering	http://www.shahandanchor.com/ce/
Information Technology	http://www.shahandanchor.com/it/
Electronics and Telecommunication Engineering	http://www.shahandanchor.com/extc/#
Electronics Engineering	http://www.shahandanchor.com/etrx/

2.6.2 Pass percentage of students

Programme Code	Programme name	Number of students appeared in the final year	Number of students passed in final semester/year	Pass Percentage

		examination	examination	
314824510	Computer Engineering (UG)	218	210	96.33%
314824510	Computer Engineering(PG)	5	5	100%
314824610	Information Technology(UG)	151	138	91.39%
314824610	Information Technology(PG)	1	1	100%
314837210	Electronics and Telecommunication Engineering	79	70	88.61%
314837610	Electronics Engineering(UG)	149	132	88.59%
314837610	Electronics Engineering(PG)	1	1	100%

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 web link)

https://www.shahandanchor.com/home/wp-content/uploads/2.7.1_Student_Satisfaction_Survey.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 Academic Year
Major Projects	----	----	----	----
Minor Projects				
1) Solution for digital forensic capability identification	One Year	Mumbai University	30,000/-	30,000/-
2) IOT based smart pothole detection and mapping system	One Year	Mumbai University	20,000/-	20,000/-
3) A novel approach in data hiding and information security system.	One Year	Mumbai University	35,000/-	35,000/-
4) No hunger for Roti Bank, Mumbai	One Year	Mumbai University	25,000/-	25,000/-
5) Electronic health record management for Bombay Leprosy Project	One Year	Mumbai University	35,000/-	35,000/-
6) Product development for Test before Taste product	One Year	Roti Bank, Mumbai	60,000/-	60,000/-
Interdisciplinary Projects				
1) Waggy Tails Project 1	One Year	----	----	----
2) Waggy Tails Project 2	One Year	----	----	----
3) Waggy Tails Project 3	One Year	----	----	----
4) Happy Bubbles	One Year	----	----	----
5) Test Before Taste	One Year	----	----	----
6) Zero Hunger	One Year	----	----	----
7) Research Website	One Year	----	----	----
8) Electronic Health Record Management System	One Year	----	----	----
9) Event Management Internship	One Month	----	----	----
10) Supertech Instrumentation Services (I) Pvt Ltd.	One Year	----	----	----
11) Digital Freedom Foundation (DFF)	One Year	----	----	----

12) Fire Fighter – Indian Development Foundation (IDF)	One Year	----	----	----
13) Breath Clean (IDF)	One Year	----	----	----
14) Speed Ambulance (IDF)	One Year	----	----	----
15) Web of Hope (IDF)	One Year	----	----	----
Industry Sponsored Projects				
Projects sponsored by the University/College	----	----	----	----
Students Research Projects (other than compulsory by the college)	----	----	----	----
International Projects	----	----	----	----
Any other (Specify)	----	----	----	----
Total	----	----	2,05,000/-	2,05,000/-

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 the Workshop/Seminar	Name of the Department	Date(s)
Pixel 2019, Tech Conclave	Computer Engineering	26/3/2019
Technical Skills Needed For Corporate Jobs	Computer Engineering	10-04-2018
Pixel 2018, Tech Conclave	Computer Engineering	04-04-2018
Project Poster Presentation	Computer Engineering	27-03-2019

Guest Lecture On “DBMS With SQL”	Computer Engineering	12-03-2019
Guest Lecture On “Signal Processing & Applications”	Electronics & Telecommunication Engineering	25-2-2019
Winter Internship 2018	Electronics & Telecommunication Engineering with E-Cell	15-12-2018 - 05-01-2019
Coding With Java	Electronics & Telecommunication Engineering with ISTE SAKEC	6-10-2018
Linux From Networking Perspective	Electronics & Telecommunication Engineering with SAKEC ACM	06-10-2018
Ethical Hacking	Electronics & Telecommunication Engineering with CSI-SAKEC	28-09-2018 - 29-09-2018
Arduino Workshop	Electronics & Telecommunication Engineering with IETE-SAKEC	01-09-2018
Hands-on-workshop And Competition On Robotics	Electronics & Telecommunication Engineering with Robo Club	27-08-2018 - 29-08-2018
SAKEC Talks: A Motivational Session	Electronics & Telecommunication Engineering with IETE-SAKEC	01-08-2018
IETE Day Celebration	Electronics & Telecommunication Engineering with IETE-SAKEC	31-01-2019

IETE Innovation Meet(Iim)-2019	IETE SAKEC	22-10-2019
IETE International Conference On Recent Trends In Sustainable Technologies	Electronics & Telecommunication Engineering with IETE-SAKEC	14-7-2018 - 15-7-2018
3 Days Hands-on Workshop & Competition On Robotics	Robo Club	25-03-2019 - 27-03-2019
3 Days Hands-on Robotics Workshop & Competition	Robo Club	27 - 29-08-2018
Expert Lecture On Space Technology	Robo Club	26-09-2018
E-yantra Lab Inauguration (Embedded Systems & Robotics Lab)	Robo Club	20-12-2018
Cognitive Skills, Design Thinking And Critical Thinking	IIC 1.0	21/12/2018
Intellectual Property Rights	IIC 1.0	21/12/2018
India First Leadership Talk (Webinar) Episode 1	IIC 1.0	08-01-2019
Workshop On Ipr By Central Expert	IIC 1.0	10-01-2019
India First Leadership Talk (Webinar) Episode 2	IIC 1.0	24/01/2019
India First Leadership Talk (Webinar) Episode 3	IIC 1.0	19th March 2019

Idea Competition	IIC 1.0	30th March 2019
India First Leadership Talk (Webinar) Episode 4	IIC 1.0	22th April, 2019
Hands-on Php	Computer Engineering with SAKEC ACM	04-08-2018
Music Production With Fl Studio	Information Technology with SAKEC ACM	08-09-2018
Mixer: Sakec Acm Members	SAKEC ACM	26/09/2018
Relational Model Redesign	Electronics Engineering with SAKEC ACM	29/09/2018
Linux From Networking Perspective	Electronics & Telecommunication Engineering with SAKEC ACM	06-10-2018
Beach Cleanup	SAKEC ACM	26/01/2019
How To Do End To End Innovation	Electronics & Telecommunications Engineering with SAKEC ACM	06-02-2019
Maranatha Harvest Mission Orphanage Society	SAKEC-ACM with Information Technology	03-02-2019
Semicode (N)	SAKEC-ACM with Information Technology	20/02/2019
Be The Hero	SAKEC-ACM with Information Technology	20/03/2019
Hands On Github	SAKEC-ACM with Information Technology	27/03/2019

SAKEC Connect	SAKEC-ACM with Computer Engineering	29/03/2019 to 30/03/2019
Photoshop	SAKEC-ACM with Information Technology	02-04-2019
Web And Mobile Application Development	Information Technology	4/1/2018 - 10/1/2019
ISTE Approved Sttp On Pedagogy For Effective Integration Of Information & Communication Technologies In Engineering Education	Electronics Engineering	3-05-2018 to 8-05-2018
Postgraduation Studies	ISTE SAKEC in collaboration with Yocket	25-07-2018
Seminar On Engineering Life	ISTE SAKEC	11-08-2018
Arduino For Beginners	ISTE SAKEC in collaboration with Department of Electronics Engineering	19-09-2018
Hands On Workshop On Vhdl	ISTE SAKEC	22-09-2018
Relational Model Redesign	Electronics Engineering with SAKEC ACM	29-09-2018
FDP On Photoshop	Electronics Engineering in association with IEEE-SAKEC	6-10-2018 and 29-09-2018
Matlab For Beginners	ISTE SAKEC in collaboration with Department of Computer Engineering	03-10-2018

How To Do End To End Innovation	Electronics & Telecommunications Engineering with SAKEC ACM	06-02-2019
Inter- Collegiate Technical Debate-	SAKEC Speakers' Club	3rd February,2018
Floor Crossing	SAKEC Speakers' Club	August 29th,2018
Inter- Collegiate Quiz Competition	SAKEC Speakers' Club	6th October,2018
Application Server Configuration In Linux	CSI-SAKEC in association with Computer Engineering	18/7/2018
Phot-o-magic	CSI-SAKEC in association with Department of Computer Engineering	2-7-2018
Ionic Framework	CSI-SAKEC in association with Department of Computer Engineering	4-8-2018
Tensorflow Framework For Mining	CSI-SAKEC in association with Department of Computer Engineering	11-8-2018
Attacks & Security In Cyber Era	CSI-SAKEC in association with Department of Computer Engineering	1-9-2018
Ethical Hacking	Department of Electronics & Telecommunication Engineering in association with CSI-SAKEC	28/9/2018 o 29/9/2018

PCRA ITP	Information Technology Department in association with CSI SAKEC	28/9/2018
Matlab For Beginners	CSI-SAKEC Student chapter in association with Department of Electronics Engineering	3-10-2018
Enhance Skills With Blockchain	Computer Engineering in association with CSI-SAKEC	3-10-2018
Python Web Frameworks	--	19/1/2019
Creating Effective Educational Videos	CSI-SAKEC Student chapter in association with Department of Information Technology	16/2/2019
Canada-India Acceleration Program (CIAP) For Start-ups	E-Cell	21-05-2018
KPIT, Pune Sparkle 2019 - Innovation Contest	E-Cell	21-5-2018
Young Innovator Competition By Innohealth	E-Cell	26-9-2018
Campus To Corporate (C2c)	E-Cell	8/10/2018, 9/10/2018, 10/10/2018
Access To Employability	E-Cell	22/10/2018, 23/10/2018, 24/10/2018

Inauguration Of Innovation Centre And Training	E-Cell	29/1/2019
Internship At Centre For Creative Learning, IIT Gandhinagar.	E-Cell	30/5/2019 - 40/7/2019
Presentation Skills	E-Cell	13/3/2019
A Magazine Launch	E-Cell	13/3/2019
Stress Free Exams	E-Cell	13/3/2019
MSME	E-Cell	13/3/2019

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

Title of the innovation	Name of the Awardee	Awarding Agency	Date of Award	Category
4 Stars Awarded	IIC 1...0	MHRD, Govt. of India	2018-19	Innovation

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

Incubation Centre	Name	Sponsored by
----	----	----
Name of the Start-up	Nature of Start-up	Date of commencement
----	----	----

3.3 Research Publications and Awards

3.3.1 Incentive to the teachers who receive recognition/awards

State	National	International
----	----	----

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

Name of the Department	No. of Ph.Ds. Awarded
----	----

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

	Department	No. of Publications	Average Impact Factor (if any)
National	I.T.	----	
International	Computer Engg.	08	5.764
	I.T.	45	10.26
	Electronics and Telecommunication	04	----
	Electronics Engg.	09	3.38
	Human Science	01	3.022

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

Department	No. of Publications
I. T. 1) Digital Forensic - Dr Nilakshi Jain 2) Artificial Intelligence: Making a System Intelligent	02
Electronics Engineering Dr Subha Subramaniam	02

Dr. V.C.Kotak	03
Prof Shikha Srivastava	01
Prof Asha Durafe	03
Prof Sarika Bukkawar	01
Computer Engineering	
Dr Bhavesh Patel	01
Ms Manimala Mahato	03
Ms. Monika Kanojiya	01
Ms Karuna Borhade	01
Ms Jaya Zalte	02
Information Technology	
Swati Nadkarni	2
Dhanashree Toradmalle	4
Dr. Nilakshi Jain	2
Dr. Kranti Ghag	1
Archana chaugule	6
Abirami Sivaprasad	3
Pranali Wagh	1
Smita Bansod	2

Lukesh Kadu	2
Rashmi Malvankar	3
Manya Gidwani	3
Manish Bhelande	3
Ashwani Deshmukh	1
Panjab Mane	1
Chetan Mahajan	1
Swati Gajbhiye	3
Nida Jawre	1
Jahanvi Gupta	2
Harish Motekar	1

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

Title of the Paper	Name of the Author	Title of the Journal	Year of Publication	Citation Index	Institutional affiliation as mentioned in the publication	Number of citations excluding self citation
Computer Engineering						
Dense Stereo Matching Based on Multi-objective Fitness Function –A Genetic	Manimala Mahato, Shirishkumar Gedam, Jyoti Joglekar,	IEEE Transaction, Transaction On Geoscience	IEEE Transaction, Transaction on	1	SAKEC	1

Algorithm Optimization Approach for Stereo Correspondence	Krishna Mohan Buddhiraju	and Remote Sensing	Geoscience and Remote Sensing, vol. 57, no. 6, pp. 3341-3353, June 2019.			
Smart Irrigation System and Crop Prediction	Akshay Narwade, Sumit Nayak, Ankita Potdar, Rajkumar Yadav and Karuna Borhade	International Researnal Journal of Engineering And Technology	April 2019,	-	SAKEC	-
Farmer Customer Relationship Management System	Apoorv Bhiwandkar, Sneha Bhalekar, Parth Gala, Parth Parekh, Jaya Zalte	International Journal of Research in Engineering, Science and Management	April-2019	-	SAKEC	-
Road Accident Prediction	Monika Kanojiya, Vipul Rana, Deepak Parmar, Hemant Joshi, Pradnya Jadhav	International Researnal Journal of Engineering and Technology	March 2019	-	SAKEC	-
Robust Fundamental Matrix Estimation Using Genetic Algorithm Based Approach With Multi-Objective Fitness Function For Stereo	Manimala Mahato and Shirishkumar Gedam	In Proceeding s of Asian Conference on Remote Sensing, Kuala Lumpur, Malaysia	2018	-	SAKEC	-

Images						
Particle Swarm Optimization Based Approach To Estimate Epipolar Geometry For Remotely Sensed Stereo Images	Manimala Mahato and Shirishkumar Gedam	In Proceedings of Int. Arch. Photogramm . Remote Sens. Spatial Inf. Sci., XLII-5, Dehradun, India, pp. 85-89, 2018. 199	2018.	-	SAKEC	-
Online Printing Access for Business Utility using Android	Devika Galia,.Ankita Babshety, Dhanashri Bagul, Kajal Sodha, Jaya Zalte	IJSRD - International Journal for Scientific Research & Development	2019	-	SAKEC	-
Augmented Reality Game Development using Unity3D	Deep Karia, Abhishek Shah, Sharan Vora, Dr.Bhavesh Patel	JETIR	2019	-	SAKEC	-
Information Technology						

Android Malware Detection using Machine Learning	Bhagyashri Chavan, Bhavika Tanna, Shivangani Jaiswal, Swati Nadkarni	International Research Journal of Engineering and Technology (IRJET)	2019	-	SAKEC	-
BAYMAX: The Depression Detection App	Naughane Simran Mohan, Gurav Shruti Suresh, Shah Vaibhavi Ajay, Joshi Gayatri Prakash, Nadkarni Swati	International Journal for Research in Applied Science & Engineering Technology (IJRASET)	2019	-	SAKEC	-
Prominence Of ECDSA Over RSA Digital Signature Algorithm	Dhanashree Toradmalle, Rohan Singh, Het Shastri, Nikita Naik, Vishal Panchidi	2018 2nd International Conference on I-SMAC (IoT in Social, Mobile, Analytics and Cloud)(I-SMAC) (IoT in Social, Mobile, Analytics and Cloud)(I-SMAC),	2018	-	SAKEC	-

Certificate less and provably Secure Digital Signature	Dhanashree Toradmalle	IJECE,2019	April2019	-	SAKEC	-
“Moderation And Strengthening of ECDSA Algorithm”	Dhanashree Toradmalle	International conference on Recent Advancements in Engineering and Technology (ICRAET-2019)	3 rd Feb ,2019	-	SAKEC	-
Cryptanalysis of an improved ECDSA	Dhanashree Toradmalle	International Journal of Engineering Research & Technology	2018	1	SAKEC	-
Placemate - SAKEC Portal	Dr. Nilakshi Jain, Taha Bohari, Nir Jakharia, Ketan Desai, Rushikesh Parab	International Research Journal of Engineering and Technology (IRJET)	2018	-	SAKEC	-
Diet system using modified RETE algorithm	Dr. Nilakshi Jain, Aniket Pathak, Ratan Boddu, Harsh Bhanushali, Amol Kadam	International Journal of Advance Research, Ideas and Innovations in Technology	2018	-	SAKEC	-

Conceptual Sentiment Analysis Model	Kranti Vithal Ghag , Ketan Shah	International Journal of Electrical and Computer Engineering (IJECE)	Aug 2018	3	SAKEC	-
IOT based system for Forest Fire Detection	Archana chaugule, Arthy Nair, Mitali B., Shivani J	International journal For Scientific Research & Development (IJSRD)	2019	-	SAKEC	-
IOT,architecture Application, and Challenges	Archana Chaugule	JETIR,2019	2019	-	SAKEC	-
Raspberry pi-based Home Automation	Archana Chaugule, Rishi G., karan M, Netra P., Rawal N.	International journal For Scientific Research & Development (IJSRD)	2019	-	SAKEC	-
IOT based Water monitoring Systems	Archana chaugule, Vineet R, Akshay N, Matta Singh	Journal of Emerging Technologies and Innovative Research (JETIR)	2019	-	SAKEC	-

Arduino Based Home Automation System	Archana Chaugule	Journal of Emerging Technologies and Innovative Research (JETIR)	June,2019	-	SAKEC	-
Automated water Metering System	Archana chaugule, Mehata Manav	IJARCS,2019	2019	-	SAKEC	-
Packet analysis based on Machine learning based Classification Algorithm	Abirami Sivaprasad	International Conference on Networks Image and Security	-		SAKEC	
Machine Learning based Traffic Classification using Statistical Analysis	Abirami Sivaprasad, Neha Ghawalkar, Srushti Hodge, Maitri Sanghavi, Vidhya Shinde	International Journal on Recent and Innovation Trends in Computing and Communication	March - 2018	3	SAKEC	-
A Complete Study on the Security Aspects of Wireless Sensor Networks	Abirami Sivaprasad	International Conference on Innovative Computing and Communications, 223-230,	2019	1	SAKEC	-

		2019				
Movie Success Prediction Using Data Mining	Antara Upadhyay, Nivedita Kamath, Shalin Shanghavi, Tanisha Mandvikar, Pranali Wagh	INTERNATIONAL JOURNAL OF ENGINEERING DEVELOPMENT AND RESEARCH (IJEDR)	2018	-	SAKEC	-
e-KrisenSeva: A Web-App based Portal for Real Time Disaster Management System	Maulik Shah, Akash Shah, Viral Parmar, Neel Dedhia, Smita Bansod	International Research Journal of Engineering and Technology (IRJET)	March-19	-	SAKEC	-
Virtual Fitness Trainer with Spontaneous Feedback using a line of motion sensing input device Kinect Xbox 360	M.V JADHAV, M.G JAIN, M.O KHANDEKAR, MS. BANSOD	International Journal of Computer Sciences and Engineering (IJCE)	Oct -2018	-	SAKEC	-
Smart wheels: Sensor Based Wheelchair Using Iot	Raj Vinod Upadhyay, Shreeprasad Subhash Shinde, Nishant Ramdas Dumbre, Pradnyal	Journal of Emerging Technologies and Innovative Research (JETIR)			SAKEC	

	Yadnyang Gandhi, Lukesh Kadu					
Improved Book Recommendation System Based On Combine Features Of Content Based Filtering, Collaborative Filtering And Association Rule Mining.	Shruti Sunil Kumbhar, Olivia Parasar Sharmaroy, Radha Narayan Rathod, Shruti Dilip Sohani, Lukesh Kadu	IJRAR-International Journal of Research and Analytical Reviews (IJRAR) (IJCRT)	2019	-	SAKEC	-
A Review of Machine learning and Deep Learning Applications	PP Shinde, S Shah	Fourth International Conference on Computing Communication Control and Automation (ICCUBEA), 2018	2018	2	SAKEC	-
Prediction of Football Match Score and Decision Making Process	Nilay Zaveri, Utkarsh Shah, Shubham Tiwari, Pramila Shinde, Lalit Kumar Teli	International Journal on Recent and Innovation Trends in Computing and Communication	2018	5	SAKEC	-

Alcohol Safety System for Automotives	Alankar Chavan , Tushar Pashte, Bhavin Shah, Dharmik Shah, Mrs.Pramila Shinde	International Research Journal of Engineering and Technology (IRJET)	April 2018	-	SAKEC	-
Cyber Crime Attack Prediction	Twinkle Shah, Sagar Parmar , Kishan Panchal, Rashmi malvankar	International Research Journal of Engineering and Technology (IRJET)	2019	-	SAKEC	-
Travel Buddy	Rashmi Malvankar, Mitali Wadekar, Mihir Salian	International journal For Scientific Research & Development (IJSRD)	2019	-	SAKEC	-
Study of Prediction Algorithms on Aviation Accident Dataset Using Rapid Miner	Dishank Kaji, Dhrumil Mehta, Divyesh Sanghani, Harsh Shah, Rashmi Malvankar	International Research Journal of Engineering and Technology (IRJET)	2019	-	SAKEC	-
Question Tagging System	H Parikh, P Patel, V Sanghrajka, C Savla, M Gidwani	International Research Journal of Engineering and Technology (IRJET)	2018	-	SAKEC	-

Toxic Comment Classification Using Convolutional Neural Network	Manya Gidwani Anoushka Samyal , Rahul Singh, Riddhi Shinde	Journal of Emerging Technologies and Innovative Research (JETIR)(International)	2019	-	SAKEC	-
Judicious Analysis of Market Basket using K- Apriori Algorithm	Manya Gidwani Siddhita Ashok Bagwe, Soumya Anil Shenoy, Kunjal Kiran Shirwalkar, Gauravi Hemant Tembulkar	Journal of Emerging Technologies and Innovative Research (JETIR)(International)	2019	-	SAKEC	-
Public Addressing System	Rohan Sharma, Abdul kamar shaikh, Umesh Yadav, Ajay Yadav, Manish Bhelande	International Research Journal of Engineering and Technology (IRJET)	2018	-	SAKEC	-
Ecommerce: An Investment Portal	Akshay Mapara, Shraddha Wayal, Akash Chheda, Karthik Mohandas, Manish Bhelande	Journal of Emerging Technologies and Innovative Research (JETIR)	2019	-	SAKEC	-

Evento: A College Event App	Akshay Kumbhar, Gaurang Bhagwat, Asmita Karale, Hiral Mav, Manish Bhelande	International Journal of Research in Engineering, Science and Management	2019	-	SAKEC	-
A System For Determining Sarcasm In Tweets: Sarcasm Detector	S Gupta, M Shah, S Shah, A Deshmukh	International Research Journal of Engineering and Technology (IRJET)	Apr-18		SAKEC	-
Augmented Reality Game Development using Unity3D	Deep Karia, Abhishek Shah, Sharan Vora, Panjab Mane	Journal of Emerging Technologies and Innovative Research (JETIR)	2019	-	SAKEC	-
Truck Booking project with invoice generator for transportation	Chetan Mahajan, Naimin Sanghvi, Ankit Sah, Dipesh Rambhia, Shivam Jaiswal	IRJET, 2019	April 2019		SAKEC	-
Survey on Virtual Reality	Nair, Himanshu Gupta, Akash Ubbu, Swati Gajbhiye	International Journal of Computer Sciences and Engineering (IJCSSE)	2019	-	SAKEC	-

Poverty Prediction Using Machine Learning	Ajay Sharma, Jatin Rathod, Rushikesh Pol, Swati Gajbhiye	International Journal of Computer Sciences and Engineering (IJCSE)	2019	-	SAKEC	-
BAYMAX: The Depression Detection App	Naughane Simran Mohan , Gurav Shruti Suresh, Shah Vaibhavi Ajay, Joshi Gayatri Prakash, Gajbhiye Swati	International Journal for Research in Applied Science & Engineering Technology (IJRASET)				-
Android Malware Detection using Machine Learning	Bhagyashri Chavan, Bhavika Tanna, Shivangani Jaiswal ,Nida Jawre	International Research Journal of Engineering and Technology (IRJET)	2019	-	SAKEC	-
IOT based Water monitoring Systems	Jahanvi Gupta, Vineet R, Akshay N, Matta Singh	Journal of Emerging Technologies and Innovative Research (JETIR)	2019	-	SAKEC	-

Automated water Metering System	Mehata Manav,Rohit Misra ,Jahanvi Gupta	IJARCS,2019	2019	-	SAKEC	-
IOT Enabled Smart Parking System	Rohit Misra, Shekhar Jain, Mihir Bonde, Prof. Harish Motekar	International Research Journal of Engineering and Technology (IRJET)	Nov 2019	-	SAKEC	-
Electronics Engineering						
Design Optimization of 10 nm Channel Length InGaAs Vertical Gate-All-Around Transistor (Nanowire)	Dr Subha Subramaniam	Advances in intelligent systems and computing Springer Journal Jan 2019 issue page 611-619 DOI:10.1007/978-981-13-1513-8_62	2019	0	Shah and Anchor Kutchhi Engineering College, Mumbai, India	0
A Review Paper on Internet of Things(IoT) and its Applications	Dr V.C Kotak	International Research Journal of Engineering and Technology (IRJET) e-ISSN: 2395-0056 p-ISSN: 2395-0072 Volume: 06	June 2019	--	Shah and Anchor Kutchhi Engineering College, Mumbai, India	-

		Issue: 06				
Polyaniline assisted USB based sensor for determination of benzene biomarker	Prof Sarika Bukkavar	Elsevier, Sensing and Bio-sensing Research volume 22(Feb 2019) https://doi.org/10.1016/j.sbsr.2019.100260	Feb 2019	--	Veermata Jijabai Technological Institute, Mumbai, India	0
Matlab/Simulink Model of sinusoidal PWM for three phase voltage source inverter	Prof Asha Durafe	International Journal of Trend in scientific Research and Development ISSN No:2456-6470/volume 2 issue 6	Oct 2018	---	Shah and Anchor Kutchhi Engineering College, Mumbai, India	0
Low Cost Smart Automation System with Energy Meter	Dr Subha Subramaniam	International Journal of Sciences: Basic and Applied Research ISSN 2307-4531	May 2019	---	Shah and Anchor Kutchhi Engineering College, Mumbai, India	

Low Cost Smart Automation System with Energy Meter	Dr.V.C.Kotak	International Journal of Sciences: Basic and Applied Research ISSN 2307-4531	May 2019	---	Shah and Anchor Kutchhi Engineering College, Mumbai, India	-
Automation of streetlight using Lora Technology	Prof Asha Durafe	International Journal of Advance Research, Ideas and Innovations in Technology ISSN: 2454 (Volume 5, Issue 2)	April 2019	---	Shah and Anchor Kutchhi Engineering College, Mumbai, India	-
A Review Paper on Internet of Things(IoT) and its Applications	Prof Asha Durafe	International Research Journal of Engineering and Technology (IRJET) e-ISSN: 2395-0056 p-ISSN: 2395-0072 Volume: 06 Issue: 06	June 2019	---	Shah and Anchor Kutchhi Engineering	0
Human Science						

The Numerical Solution of Nonlinear Nonhomogeneous System of Differential Equations By Differential Transform Technique	S. P. Dahake, G. Purohit , A.V. Dubewar	International Journal of Computer Sciences and Engineering	2018	-	Shah and Anchor Kutchhi Engineering College, Mumbai.	-
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3.3.6 h-index of the Institutional Publications during the year. (based on Scopus/ Web of science)

Title of the Paper	Name of the Author	Title of the Journal	Year of Publication	h-index	Number of citations excluding self citations	Institutional affiliation as mentioned in the publication
Design Optimization of 10nm Channel Length InGaAs Vertical Gate-All-Around Transistor (Nanowire)	Dr. Subha Subramaniam	Advances in intelligent systems and Computing Springer Journal Jan 2019 issue Page 611-619 DOI:10.1007/978-981-13-1513-8_62	2019	1	0	SAKEC
Polyaniline assisted USB based sensor for	Prof Sarika Bukkawar	Elsevier , Sensing and Bio-	Jan 2019	1	0	Veermata Jijabai Technological

determination of benzene biomarker		sensing Research				Institute, Mumbai, India
Design Optimization of 10 nm Channel Length InGaAs Vertical Gate-All-Around Transistor (Nanowire)	Dr Subha Subramaniam	Advances in intelligent systems and computing Springer Journal	2019	1	0	Shah and Anchor Kutchhi Engineering College, Mumbai, India
A Review Paper on Internet of Things(IoT) and its Applications	Dr V.C Kotak	International Research Journal of Engineering And Technology (IRJET)	June 2019	----	----	Shah and Anchor Kutchhi Engineering College, Mumbai, India
Polyaniline assisted USB based sensor for determination of benzene biomarker	Prof Sarika Bukkawar	Elsevier , Sensing and Bio-sensing Research	Jan 2019	1	0	Veermata Jijabai Technological Institute, Mumbai, India
Matlab/Simulink Model of sinusoidal PWM for three phase voltage source inverter	Prof Asha Durafe	International Journal of Trend in scientific Research and Development	Oct 2018			Shah and Anchor Kutchhi Engineering College, Mumbai, India
Low Cost Smart Automation System with Energy Meter	Dr Subha Subramaniam	International Journal of Sciences: Basic and	May2019	-	-	Shah and Anchor Kutchhi Engineering College,

		Applied Research				Mumbai, India
Low Cost Smart Automation System with Energy Meter	Dr V.C.Kotak	International Journal of Sciences: Basic and Applied Research ISSN 2307-4531	May2019	-	-	Shah and Anchor Kutchhi Engineering College, Mumbai, India
Automation of streetlight using Lora Technology	Prof Asha Durafe	International Journal of Advance Research, Ideas and Innovations in Technology	April2019	-	-	Shah and Anchor Kutchhi Engineering College, Mumbai, India
A Review Paper on Internet of Things(IoT) and its Applications	Prof Asha Durafe	International Research Journal of Engineering and Technology (IRJET)	June 2019	-	-	Shah and Anchor Kutchhi Engineering College, Mumbai, India
Smart Irrigation System and Crop Prediction	Akshay Narwade, Sumit Nayak, Ankita Potdar, Rajkumar Yadav and Karuna Borhade	International Researnal Journal of Engineering and Technology	April 2019, Volume-6, Issue-4, ISSN:239 50056	----	----	SAKEC
Road Accident	Monika Kanojiya,	International	Volume 6 Issue 3	----	----	----

Prediction	Vipul Rana,Deepak Parmar, Hemant Joshi, Pradnya Jadhav	Researnal Journal of Engineerin g and Technolog y	march 2019 issn- 23950072			
Farmer Customer Relationship Management System	Apoorv Bhiwandkar, Sneha Bhalekar, Parth Gala, Parth Parekh,Jaya Zalte	Internation al Journal of Research in Engineerin g, Science and Manageme nt	Volume-2, Issue-4, April-2019 www.ijre sm.com ISSN (Online): 25815792	-----	----	SAKEC
Online Printing Access for Business Utility using Android	Devika Galia, Ankita Babshety, Dhanashri Bagul, Kajal Sodha, Jaya Zalte	IJSRD - International Journal for Scientific Research & Developmen t	Vol. 7, Issue 01, 2019 ISSN (online): 2321-061 3 Link:http://ijsrd.com/Article .php?manus cript=I JSRDV7I 11070	-----	----	SAKEC
Robust Fundamental Matrix Estimation Using Genetic Algorithm Based Approach With Multi-Objective Fitness Function For Stereo Images	Manimala Mahato and Shirishkumar Gedam	In proceeding s of Asian Conference on Remote Sensing, Kuala Lumpur, Malaysia	In Proceedings of Asian Conference on Remote Sensing, pp. 3040-304 5, 2018	-----	----	SAKEC
Particle Swarm	Manimala Mahato and	In Proceeding	In Proceedigs	-----	----	SAKEC

Optimization Based Approach To Estimate Epipolar Geometry For Remotely Sensed Stereo Images	Shirishkumar Gedam	s of Int. Arch. Photogram m . Remote Sens. Spatial Inf. Sci., XLII-5, Dehradun, India, pp. 85-89, 2018. 199	of Int. Arch. Photogram m. Remote Sens. Spatial Inf. Sci., XLII-5, Dehradun , India, pp. 85-89, 2018.			
Dense Stereo Matching Based on Multi-objective Fitness Function –A Genetic Algorithm Optimization Approach for Stereo Correspondence	Manimala Mahato, Shirishkumar Gedam, Jyoti Joglekar, Krishna Mohan Buddhiraju	IEEE Transaction , Transaction on Geoscience and Remote Sensing,	IEEE Transaction, Transaction on Geoscience and Remote Sensing, vol. 57, no. 6, pp. 3341-3353, June 2019.	---	1	SAKEC
“Moderation And Strengthening of ECDSA Algorithm	Ms. Dhanashree Toradmalle	ICRAETS	3rd Feb, 2019	1	0	SAKE C
Prominence of ECDSA over RSA digital Signature algorithm		I-SMAC 2018 (IEEE)	August 2018	-	0	SAKEC
Cryptanalysis of an improved ECDSA		IJERT 2018	August 2018	--	0	SAKEC
Certificateless and provably Secure Digital Signature		IJECE,2019	April 2019	--	0	SAKEC

Fingerprint Mining & Optimization in a large data set	Ms. Jalpa Mehta	IEEE-ICNT ET,2019	April 2019	2	0	SAKEC
Word Embedding based Multinomial Naïve Bayes Algorithm for Spam Filtering	Dr. Kranti Ghag	ICCUBEA	2018	3	0	SAKEC
Conceptual sentiment analysis model Open Access		International Journal of Electrical and Computer Engineering	2018	--	0	SAKEC
Handling polarity shift for opinion mining		Proceedings of the International Conference on Computing Methodologies and Communication, ICCMC 2017	2018	--	0	SAKEC
Dimensionality reduction for sentiment analysis using pre-processing techniques		Proceedings of the International Conference on Computing Methodologies and Communication,	2018	--	0	SAKEC

		ICCMC 2017				
Analysis of machine Learning based Classification Algorithm for Network Attack	Ms.Abirami Shivaprasad	ICNIS	2019	1	0	SAKEC
Packet Analysis based on machine Learning based Classification Algorithm		ICNIS	2019	--	0	SAKEC

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

No. of Faculty	International level	National level	State level	Local level
Attended Seminars/ Workshops	-----	02	04	01
Presented papers	5		01	10
Resource Persons	1	1	02	11

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 co-ordinated such activities	Number of students participated in such activities
Corporate Social Responsibility	Zilla Parishad School, Posariwadi, Panvel	7	10
“Daan Utsav 2018 ”	SAKEC in collaboration with Roti Bank, Mumbai	5	2
Blood Donation	IEEE SAKEC	-	3

Industrial Visit to Airport Authority of India, Andheri	EXTC Department SAKEC, Airport Authority of India	02	46
Industrial visit to “BSNL Satellite Earth Station” at Yeur, Thane	EXTC Department SAKEC, BSNL	02	19
Food Donation Campaign	IEEE-SAKEC & Roti Bank	01	10
Blood Donation	IEEE-SAKEC	01	142
Help Kerala Campaign	IEEE-SAKEC	01	10
Workshop on self-defence for girl students	IIC 1.0 - SAKEC	06	160
How to do End to End Innovation	ACM SAKEC & Department of Electronics	02	38
Guest lecture on Industrial Automation	Department of Electronics	02	33
Industrial Visit to “Tata center for Technology and Design, IT Mumbai”	Department of Electronics with ISTE SAKEC	01	28
Industrial visit to CSTM	Department of Electronics with ISTE SAKEC	01	39

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	No. of Students benefited
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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/ agency/ collaborating agency	Name of the activity	Number of teachers coordinated such activities	Number of students participated in such activities
Corporate Social Responsibility	Zilla Parishad School, Posariwadi, Panvel	Joy of Giving	7	10
Corporate Social Responsibility	SAKEC in collaboration with Roti Bank, Mumbai	“Daan Utsav 2018 ”	5	2
Corporate Social Responsibility	IEEE SAKEC	Blood Donation	-	3
Community Support Scheme	Roti Bank	Food Donation Campaign	01	10
Community Support Scheme	IEEE-SAKEC	Blood Donation	01	142
Calamity victim Support Scheme	IEEE-SAKEC	Help Kerala Campaign	01	10

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
Winter Internship	Faculty	Ms Asha Durafae	Supertech Instrumentation Services(I) Pvt Ltd	1st January 2019 to 15 th January 2019
		Rahul Jagtap		
		Sushil Maurya		
	Student	Shivangi Parmar		
Product Development	Faculty	Ms Asha Durafe & Prof Manisha Mane	Roti Bank	1st February 2019 to 31st May 2019
		Chinmay Yadav		
		BhimaniUrvi		
		Singh Yash		

	Student	Mistry Dhanesh		
Breathe clean Collaboration: Indian Development Foundation	Faculty	Prof.Mamta Tikaria	-----	1 Year
	Student	Mitesh Mehta Mayur Nikharge Nihar patil Viraj saiya		
Fire fighter Robot Collaboration: Indian Development Foundation	Faculty	Prof.Mamta Tikaria	-----	1 Year
	Student	Aatif Dakhve Payal Achrekar Sameer Raut Shrikant fulwade		
Research Projects 1. Test Before Taste 2. Breathe Clean 3. Zero Hunger 4. Speed Ambulance 5. Breathe Clean 6. Fire Fighter 7. Web of Hope 8. Electronic Health Record Management System.		Prof Asha Durafe Prof Manisha Mane Urvi Bhimani Dhanesh Mistry Yash Singh Chinmay Anand Yadav Yogesh Vishwakarma Moksh Jadhav Shailesh Mourya Hiren Bhanushali Ankit Goswami Arnik Gala Ms.Dhanashree Toradmale Saish Khandare Vedant Parikh Janhavi Desale Kunal Gautam Raj Raval Bhikesh Khute Prasad Dighe Karun Kaul Vivek Kumar Mourya Radhika Pilankar Darsh Bhimani Parshav Shah Femin Dharamshil Ms Mamta Tikaria Aatif Dakhway Payal Acharekar Shrikant Fulwade	Roti Bank	1 Year

		<p>Sameer Raut Ms Mamta Tikaria Viraj Saiya Mitesh Mehta Mayur Nikharge Nihar Patil Dr Nilakshi Jain SharanVora Ansh Ved Nihar Avlani Smit Mehta Upasana Singh Aashay Korani Jash Jain Avani Ganatra Sanish Tupe Purtee Bhise Ms Vaishali Hirlekar Advait Doshi Nemish Doshi Aditya sakpal Harsh Gangar Jai Parekh Nikhil Shetty Viraj Modi Yashkumar Oswal</p>		
Leaders in Action – Celebration of Inspiration, Knowledge and Giving	102	SAKEC	1 Day	1 Year
ME BECOMES WE: Together to Build a Strong Nation	205	SAKEC	1 Day	1 Year
Diving into Deep Learning	16	SAKEC	2 Days	1 Year
Student Leadership Program by IDF	52	SAKEC	1 Day	1 Year

SAKEC in collaboration with Roti Bank Mumbai promote "Daan Utsav"	26	SAKEC	1 Month	1 Year
Celebration of Collaboration with Project Launch	29	SAKEC	1 Day	1 Year
Student Leadership Program at Anjuman Islam School	27	SAKEC	6 Days	1 Year
Leaders in Action – Celebration of Inspiration, Knowledge and Giving	102	SAKEC	1 Day	1 Year

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-To)	Participant
Internship	Internship	Reliance Retail Limited	7 weeks	Kushal Shah
Internship	Internship	Bhabha Atomic Research Centre	45 days	Mitra Sukanya
Internship	Internship	Crif High Mark Credit Information Services Private Limited	1 month	Aman Gandhi
Internship	Internship	Bhabha Atomic Research Centre	45 days	Patnaik Rita

Internship	Internship	Bhabha Atomic Research Centre	45 days	Gala Forum
Internship	Internship	Bhabha Atomic Research Centre	45 days	S.Smriti
Internship	Internship	Mech2it	2 months	Ashish Ghadigaonkar
Internship	Internship	Edelweise	2 months	Kushal Shah
Internship	Internship	Techkatech Innovation Hub	2 months	Chawda Nisha
Internship	Internship	Tasklance	45 days	Neha Gawde
Internship	Internship	Chandahas Technologies Pvt.Ltd.	2018	Suvam Das
Internship	Internship	Maithon Power Limited	10 days	Harshita Chandra
Internship	Internship	Linuxworld Informatics Pvt Ltd	40 days	Urmil Lodaya
Internship	Internship	Kisigntech	2018-19	Jai Parekh
Internship	Internship	Trc48 Through Internshala	2019	Harsh Shah

Internship	Internship	Herbolab India Private Ltd.	2 months	Parth Gite
Internship	Internship	Ilife Digital Solutions Pvt.Ltd	45 days	Upasana Dodiya
Internship	Internship	Ifuture Technologies Private Limited	1 month	Nandkumar Gatkul
Internship	Internship	Internshala	2 months	Nandkumar Gatkul
Internship	Internship	Clevertap	29 days	Rushabh Mehta
Internship	Internship	Indian Development Foundation – Research Cell (Sakec)	2018-19	Aditya Sakpal
Internship	Internship	Tantra	2018-19	Raj Jogi
Internship	Internship	Tata Institute Of Social Science	1 month	Urvi Shah
Internship	Internship	Niscit	2019	Ashish Ghadigaonkar
Internship	Internship	Across The Globe (Atg)	2019	Ashish Ghadigaonkar

Internship	Internship	Bhabha Atomic Research Centre	45 days	Sumit Nayak
Internship	Internship	Oil And Natural Gas Corporation Limited	1 month	Suprit Vaidya
Internship	Internship	Research Cell, Sakec	1 month	Utsavi Mhapsekar
Internship	Internship	Research Cell, Sakec	1 month	Jaspreet Singh Chima
Internship	Internship	Research Cell, Sakec	1 month	Diksha Shah
Internship	Internship	Conscript Hr Advisors Pvt.Ltd.	1 month	Angad Gosain
Internship	Internship	Intap Technologies Pvt.Ltd.	1 month	Ankita Potdar
Internship	Internship	Jain Software Developers	2018	Shrey Gandhi
Internship	Internship	India Redined	2018	Shrey Gandhi
Internship	Internship	Linuxworld Informatics Pvt Ltd	35 days	Piyush Jain
Internship	Internship	Linuxworld Informatics Pvt Ltd	40 days	Hemant Joshi

Internship	Internship	Laugh Out Loud Ventures Pvt.Ltd.	2 months	Karan Chheda
Internship	Internship	Central Drug Research Institute	2018	Vipul Rana
Internship	Internship	Protechmanize	3 months	Urmil Lodaya
Internship	Internship	Linuxworld Informatics Pvt Ltd	40 days	Mihir Jain
Internship	Internship	Panasonic	3 months	Niraj Bamboli
Internship	Internship	Navlakhi	6 months	Parth Shah
Internship	Internship	Navlakhi	6 months	Krimesh Shah
Internship	Product Development	Roti Bank Mumbai	4 months	Chinmay Yadav
Internship	Product Development	Roti Bank Mumbai	4 months	BhimaniUrvi
Internship	Product Development	Roti Bank Mumbai	4 months	Singh Yash
Internship	Product Development	Roti Bank Mumbai	4 months	Mistry Dhanesh

Internship	Internship	Supertech Instrumentation Services(I)Pvt Ltd 13 Vardhaman Industrial complexThane 400601	15 days	Rahul Jagtap
Internship	Internship	Supertech Instrumentation Services(I)Pvt Ltd 13 Vardhaman Industrial complexThane 400601	15 days	Sushil Maurya
Internship	Internship	Supertech Instrumentation Services(I)Pvt Ltd 13 Vardhaman Industrial complexThane 400601	15 days	Shivangi Parmar
Internship	Internship	Prolific Systems and Technology Pvt Ltd, Thane	One month	Mohammad Aiyooob
Internship	Internship	Fraser Techno Circuits Ltd., Andheri Mumbai 400053	One month	Vrushank Shah
Internship	Internship	EMU Carshed,Kurla	6 days	Shweta Sawant
Internship	Internship	Bharat Sanchar Nigam limited	5 days	Dipika Neman
Internship	Satellite Communication Internship	BSNL:Telecom Transmission Technologies - Satellite Communication	1 week	Panchal Riddhi
Internship	Satellite Communication Internship	BSNL:Telecom Transmission Technologies - Satellite Communication	1 week	Raul Tejal
Internship	Satellite Communication	BSNL:Telecom Transmission Technologies - Satellite Communication	1 week	Patil Priyanka

	Internship			
Internship	Winter Internship	SAKEC: Visitor Counter using Aurdino	3 week	Khomane Akshata
Internship	Winter Internship	SAKEC: Visitor Counter using Aurdino	3 week	Raul Tejal
Internship	Vocational Training	Vocational Training with Doordarshan Kendra	1 week	Anup shinde
Internship	Vocational Training	Vocational Training with Doordarshan Kendra	1 week	Gupta Rohit
Internship	Vocational Training	Vocational Training with Doordarshan Kendra	1 week	Bagve Jayesh
Internship	Vocational Training	Vocational Training with Indian Railways	1 week	Choudhari Sayali
Internship	Vocational Training	Vocational Training with Indian Railways	1 week	Chavan Parth
Internship	Vocational Training	Vocational Training with Indian Railways	1 week	Dhumal Jayesh
Internship	Vocational Training	Vocational Training with Indian Railways	1 week	Wadekar Sanket
Internship	Vocational Training	Vocational Training with Indian Railways	1 week	Upadhyay Ajit

Internship	Vocational Training	Vocational Training with Indian Railways	1 week	Dedhia Mahek
Internship	Vocational Training	Vocational Training with Indian Railways	1 week	Tapse Nishad
Internship	Vocational Training	Vocational Training with Indian Railways	1 week	Shinde Ganesh
Internship	Vocational Training	Vocational Training with Indian Railways	1 week	Benke Aniket
Internship	IOT and ML Internship	Inventrom private limited	2months	Vinayak Kukrety
Internship	IOT Internship	SAKEC	3 weeks	Vinayak Kukrety
Internship	Doordarshan Kendra Internship	Doordarshan Kendra	1 week	Gayatri Vichare
Internship	Winter Internship	SAKEC	3 weeks	Shraddha Hande
Internship	Winter Internship	SAKEC	3 weeks	Chirag Vora
Internship	Telecom Transmission Internship	BSNL	1 week	Shraddha Hande

Internship	Fire Fighter Robot	Indian Development foundation	1 year	Payal Achrekar
Internship	Fire Fighter Robot	Indian Development foundation	1 year	Sameer Raut
Internship	Fire Fighter Robot	Indian Development foundation	1 year	Shrikant Fulwade
Internship	Fire Fighter Robot	Indian Development foundation	1 year	Aatif Dakhway
Internship	Breath clean	Indian Development foundation	1 year	Viraj Saiya
Internship	Breath clean	Indian Development foundation	1 year	Mayur nikharge
Internship	Breath clean	Indian Development foundation	1 year	Mitesh Mehta
Internship	Breath clean	Indian Development foundation	1 year	Nihar Patil
Internship	Bharti Airtel LTD Internship	Bharti Airtel LTD	1 month	SHETTY ROOPALI S
Internship	Winter Internship	IT Departmet,SAKEC	1 month	PATRA VIKAS SUBHASHCHAN

Internship	Winter Internship	E-cell,SAKEC	1 month	Bhavya Rajesh Joshi
Internship	Campus Ambassador internship	TBS planet	1 month	PATRA VIKAS SUBHASHCHAN
Internship	Web Development Internship	Sahu Technologies	1 month	Patel Harsh Vinod Bhai
Internship	Industrial training	Internshala	1 month	Preet Nagda
Internship	Internship	Pals (India) Pvt Ltd	1 month	Preet Nagda
Internship	Web Development Internship	Sahu Technologies	1 month	Dhanali Modi
Internship	Android Development Internship	VH Technologies	3 months	Rutvik Panchal
Internship	Internship	R.C.F	1 month	Aditya Pawar
Internship	Research and Development Internship	Edurprime technologies pvt ltd	1.5 Year	Utsav Gada

Internship	Internship	Unifox Global Services Pvt. Ltd.	1 month	Mildeep Singh Pahwa
Internship	Winter Internship	IT Department,SAKEC	1 month	Disha Pankaj Shah
Internship	Winter Internship	IT Department,SAKEC	1 month	Jay Nilesh Visaria
Internship	Web Development Internship	Sahu Technologies	1 month	Harshkumar Patel
Internship	Research and Development Internship	EDUPRIME	1 year 9 months	Nill shah
Internship	Web Development Internship	Sahu Technologies	1 month	Prathamesh Bhavsar
Internship	Internship	Raj Computers Academy	1 month	Vidhi Kalpesh Sheth
Internship	Internship	Raj Computers Academy	1 month	Vrushali Kalpesh Sheth
Internship	Web Development Internship	Sahu Technologies	1 month	Solani Vinit
Internship	Internship	April Innovations	1 month	Rushabh Shah

Internship	Internship	Harrier Information Pvt. Ltd.	1 month	Tarun sankhala
Internship	Internship	INNO Instrument India Pvt. Ltd.	1 month	Meet Shah
Internship	Internship	Harrier Information Pvt. Ltd.	1 month	Nikunj Panchal
Internship	Internship	Harrier Information Pvt. Ltd.	1 month	Rushabh Shah
Internship	Internship and Product Developmen	Roti Bank	1 year	Vedant Parikh
Internship	Winter Internship	Shah And Anchor Kutchhi Engineering college	1 month	Deepika Manche
Internship	Internship	Harrier Information Pvt. Ltd.	1 month	Deepika Manche
Internship	Internship	STUDYSID EDUTECH SOLUTIONS PVT. LTD.		Tarun sankhala
Internship	Research and Development Internsh	Eduprime Technologies Pvt. Ltd.	1 month	Nishit Mistry
Internship	Research and Development Internsh	Eduprime Technologies Pvt. Ltd.	1 month	Parth Joshi

Internship	Internship	Research Cell,SAKEC	1 month	Haresh Bhanushali
Internship	Internship	E-cell,SAKEC	1 month	Hiral Makwana
Internship	Vocational training	Doordarshan Kendra	6 days	Nair Neha
Internship	Internship	Harrier Information Pvt. Ltd.	1 month	Hiral Makwana
Internship	Winter Internship	Shah And Anchor Kutchhi Engineering college	1 month	Bhavya Patel
Internship	Internship	Harrier Information Pvt. Ltd.	1 month	Rushab Botadra
Internship	Winter Internship	IT Departmet,SAKEC	1 month	Upasana Singh
Internship	Internship	The Sparks Foundation	2 months	Dharmik Bhanushali

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

Organization	Date of MoU signed	Purpose and Activities	Number of students/teachers participated under MoUs
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Supertech Instrumentation Services(IPvt Ltd)	29/12/2018	Internship	06(student) 01(Faculty)
Roti Bank	04/08 2018	Product Development	13(student) 02(Faculty)
Indian Development Foundation(IDF)	23rd March 2018	This Memorandum of Understanding (MoU) is between Indian Development Foundation (IDF- formerly Indian Leprosy Foundation Non-Government Organization) and Shah & Anchor Kutchhi Engineering College (SAKEC)	3 Faculties, 26 students
Bennett University	26th April 2018	Collaboration with Bennett University ,Royal Academy of Engineering, UK; NVIDIA, Amazon, University College London and Brunel University for “Making Deep Learning and AI skills mainstream in India to fulfil trilateral needs of entrepreneurship, Industry-academia partnership and application-inspired Engineering Research” :	
Bombay Leprosy Project	26th July 2018	This Memorandum of Understanding (MoU) is between Bombay Leprosy Project (BLP) is a registered non-governmental voluntary organization established in 1976 and Shah & Anchor Kutchhi Engineering College (SAKEC).	1 Faculty, 9 Students

		Faculty members or students involved in such research shall be encouraged to write problem statements. The project implementation of these problem statements will be beneficial to the organization.	
Roti Bank Mumbai	4th August 2018	This Memorandum of Understanding (MoU) is between Roti Bank Mumbai [Reg: E34021(M)] and Shah & Anchor Kutchhi Engineering College (SAKEC) . Faculty members or students involved in such research shall be encouraged to write problem statements. The project implementation of these problem statements will be beneficial to the organization.	3 Faculties, 23 Students
Waggy Tails Private Limited	22nd November 2018	Students Corporate Responsibility (SCR) Memorandum of Understanding This Memorandum of Understanding (MoU) is between Waggy Tails Private Limited AND Shah & Anchor Kutchhi Engineering College (SAKEC). SAKEC shall engage in joint operational research with WAGGY TAILS PRIVATE LIMITED, in	1 Faculty, 31 Students

		<p>selected areas of interest to both organizations. Faculty members or students involved in such research shall be encouraged to write problem statements. The project implementation of these problem statements will be beneficial to the organization.</p>	
Digital Freedom Foundation (DFF)	22nd November 2018	<p>This Memorandum of Understanding (MoU) is between Digital Freedom Foundation (DFF) And Shah & Anchor Kutchhi Engineering College (SAKEC). SAKEC shall engage in joint operational research with DFF, in selected areas of interest to both organizations. Faculty members or students involved in such research shall be encouraged to write problem statements. The project implementation of these problem statements will be beneficial to the organization.</p>	1 Faculty, 9 students
Supertech Instrumentation Services (I) Pvt. Ltd.	29th December 2018	<p>This Memorandum of Understanding (MoU) is between Supertech Instrumentation Services (I) Pvt. Ltd., Thane and Shah & Anchor Kutchhi Engineering College (SAKEC). Supertech Instrumentation Services (I) Pvt. Ltd. is Alliance</p>	1 Faculty, 4 Students

		<p>Integration Partner with Schneider Electric for their Automation Products- PLC, SCADA, DCS, VFDs & Soft-starters, Intelligent MCCs and EcoXpert - Energy Monitoring Solutions.</p> <p>Supertech Instrumentation Services (I) Pvt. Ltd., under this MoU will give a chance to SAKEC students to undergo minimum 15 days of Industry Internship during summer and winter vacations.</p> <p>This MoU thus bridges the gap between industry and academics by incorporating student internship programs.</p>	
<p>Live Your Dream Foundation (Happy Bubbles)</p>	<p>13th March 2019</p>	<p>Memorandum of Understanding is between Live Your Dream Foundation (Happy Bubbles) AND Shah & Anchor Kutchhi Engineering College (SAKEC)</p> <p>Definitions and Recitals</p> <p>Live Your Dream Foundation was established on November 26, 2015 and have carried on its activities in the field of social service in various sectors, a few of which include Education and</p>	<p>2 Faculties, 9 Students</p>

		Healthcare, Rural Development, Cancer Care, Women Empowerment, Animal Welfare, Livelihood and Rural Development, Mental Health, Spiritual Holistic Healing, Environment and Nature Care, Yoga and Career Counselling. Live Your Dream Foundation was re-branded in the year 2018 and is now better known as Happy Bubbles.	
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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
150.00 Lakhs	136.4514 Lakhs

4.1.2 Details of augmentation in infrastructure facilities during the year

Facilities	Existing	Newly added
Campus area	6189sqm	-
Class rooms	34+04(Tutorial Room)	04(Tutorial Room)
Laboratories	54	-
Seminar Halls	06	-
Classrooms with LCD facilities	24	10
Classrooms with Wi-Fi/ LAN	-	34+(08 Tutorial Room)
Seminar halls with ICT facilities	06	-
Video Centre	-	-
No. of important equipment purchased (\geq 1-0 lakh) during the current year.	33	10
Value of the equipment purchased during the year (Rs. in Lakhs)	96.74Lakhs	13.44Lakhs
Others: 1.Lab Renovation	-	02nos
2.Digital Projection System	-	05nos

3.Washrooms Renovation	-	06nos
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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 partially)	Version	Year of automation
Library (In-house Software)	Fully	December2019	2000

4.2.1 Library Services:

	Existing		Newly added		Total	
	No.	Value	No.	Value	No.	Value
Text Books	21835	80.00Lakhs	296	2.13Lakhs	22131	82.14Lakhs
Reference Books	1150	9.59Lakhs	16	0.73Lakhs	1166	10.32Lakhs
e-Books	761	1.57Lakhs	827	2.05Lakhs	827	2.05Lakhs
Journals	54	4.85Lakhs	48	5.17Lakhs	48	5.17Lakhs
e-Journals	1263	39.01Lakhs	1263	49.82Lakhs	1263	49.82Lakhs
Digital Database	06	40.58Lakhs	06	51.87Lakhs	06	51.88Lakhs
CD & Video	2500	Free	100	Free	2600	Free
Library automation	Yes	-	Yes	-	Yes	-
Weeding (Hard & Soft)	364	32,136/-	-	-	364	32,136/-
Others (specify)	-	-	-	-	-	-

4.3 IT Infrastructure

4.3.1 Technology Up gradation (overall)

	Total Comp	Compu-ter	Inter-net	Brow-sing	Comp-uter	Office	Depart-ments	Avail-able	Others

	Users	Labs		Centres	Centres			band width (MG BPS)	
Existing	1032	33	100M BPS	33+Library	Exam Section + 01	01	04	100M BPS	-
Added	77	-	120M BPS	-	-	-	-	120M BPS	1. e-Yantra Laboratory 2. Idea Generation Software 3. Anti Plagiarism Urkund Software
Total	1109	33	120M BPS	34	02	01	04	120M BPS	1. e-Yantra Laboratory 2. Idea Generation Software 3. Anti Plagiarism Urkund Software

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

120 MBPS Tata Communications

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
Google Classrooms, Digital Library, Intranet	-

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

Name of the teacher	Name of the module	Platform on which module is developed	Date of launching e - content
Mr. Bhav Uday	Computer Department Resources	Intranet	05/12/2018
Dr. Rekha Ramesh	Computer Department Resources	Intranet	05/12/2018
Ms. Devmane Vidyullata	Computer Department Resources	Intranet	07/12/2018
Ms. Vishwakarma Pinki	Computer Department Resources	Intranet	05/12/2018

Ms. Sayyad Shahzia Majid	Computer Department Resources	Intranet	17/02/2019
Dr. Manimala Mahato	Computer Department Resources	Intranet	16/03/2019
Mr. Dhande Manoj S.	Computer Department Resources	Intranet	05/12/2018
Ms. Bhutad Sonali Amol	Computer Department Resources	Intranet	15/02/2019
Ms. Chavan Vaishali	Computer Department Resources	Intranet	15/02/2019
Ms. Sonawane Bhakti	Computer Department Resources	Intranet	25/02/2019
Ms. Chaturvedi Deepshikha	Computer Department Resources	Intranet	16/03/2019
Ms. Borhade Karuna	Computer Department Resources	Intranet	05/12/2018
Mr. Dhumal Amol	Computer Department Resources	Intranet	04/04/2019
Ms. Maru Tina	Computer Department Resources	Intranet	05/12/2018
Ms. Zalte Jaya	Computer Department Resources	Intranet	15/02/2019
Ms. Pawar Dipti	Computer Department Resources	Intranet	05/12/2018
Mr. Hirave Tejas	Computer Department Resources	Intranet	15/02/2019
Ms. Kanojiya Monika	Computer Department Resources	Intranet	16/02/2019
Ms. Rane Sarika	Computer Department Resources	Intranet	05/12/2018
Ms. Nikumb Dipti	Computer Department Resources	Intranet	07/12/2018
Ms. Hirlekar Vaishali	Computer Department Resources	Intranet	05/12/2018, 15/02/2019
Mr. Kachare Atul	Computer Department Resources	Intranet	05/12/2018
Ms. Thakur Dhanashri	Computer Department Resources	Intranet	11/12/2018
Ms. Ekhande Deepa	Computer Department Resources	Intranet	15/02/2019
Ms. Patil Shweta	Computer Department Resources	Intranet	04/12/2018, 15/02/2019
Ms. Chotai Krupa	Computer Department Resources	Intranet	05/12/2018
Ms. Shewale Snehal	Computer Department Resources	Intranet	06/12/2018
Ashwini Deshmukh	Automata Theory, Data Structure	Google Classroom	11/01/2019
Archana Chaugule	Computer Organization and Architecture	Google Classroom	11/01/2019

Abirami Sivaprasad	Operating System	Google Classroom	11/01/2019
Bhargavi Dalal	Micro Programming Language Lab	Google Classroom	11/01/2019

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 incurred on maintenance of physical facilities
40.00 Lakhs	34.5775 Lakhs	90.00 Lakhs	82.5706 Lakhs

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)

1) Maintenance of Physical Infrastructure and Support facility

Cleanliness beautifies the campus, makes it delightful and improves focusing on study. Knowing this, every effort is made to make the campus clean and beautiful. The Institute has a garden which is regularly maintained. Adequate human resources are deployed exclusively for maintenance and upkeep of campus infrastructure.

The Institute sees to it that all resources in the campus are always up and running. It is made possible by having a robust system and well defined procedures for maintenance of all facilities. The procedure is followed as below for the maintenance: -

- The request for maintenance is entered in a register maintained by the Estate Manager at the Institute level.
- The maintenance schedule is then executed with the support of external agencies.
- Emergency maintenance is carried out on priority basis.

a) Routine Maintenance

- Cleaning, Dusting, Sweeping and Mopping of all areas is undertaken daily by the contractual housekeeping staff and is supervised by the supervisor.
- For minor repairs, the Institute has a workforce of carpenters and electricians.

b) Preventive Maintenance

- Electrical Maintenance: - The activities related to maintenance of electrical fittings, public address system, pump rooms etc. are supervised and done by Institute's electrician.
- Air Conditioning: - Many laboratories of the institute are air conditioned. The maintenance of the heating, ventilation and air conditioning system is outsourced.
- Lifts: All the lifts are maintained through AMC with Kone Elevators.
- Water Coolers and purifiers: - The equipment maintenance is done by the contractual agency with which the institute has AMC.
- Pest control: - Pest control which includes combating general disinfection, rodent treatment and anti-termite is done periodically.
- Gymnasium: - A fully air conditioned and equipped gymnasium facility is available for all the students. A full-time trainer is appointed in the gymnasium. The maintenance of the gymnasium is carried out by a contractual agency.
- Fire Extinguisher: - As a safety measure fire extinguisher is equipped on every floor. Its

maintenance is taken care by the contractual agency.

- Auditorium: - An elegant and spacious auditorium is available for conducting cultural activities. It is maintained by the appointed staff of the Institute.
- Garden: - The cutting, cleaning, watering, soiling etc. Activities in the garden are done by the Institute's gardener.
- First Aid Kit: - First Aid Kit is available in each laboratory to handle basic emergencies.

2) Maintenance of IT Infrastructure

The institute has a full-time maintenance engineer and an independent maintenance room for carrying out IT maintenance.

The laboratories are cleaned and dusted every day. Power cables are properly insulated and laid away from pathways.

Every laboratory maintains a complete record of the equipment such as dead stock Register, maintained by the laboratory in-charge along with laboratory assistant as and when new software or hardware is procured in the laboratory register. This register is updated. The overall maintenance of the laboratory equipment and installation of various software's required is taken care of by the respective lab assistants. Minor repairs of the hardware kits and systems are handled by the lab assistants. Major trouble shooting is done by the maintenance engineer of the Institute.

3) Maintenance of library

The books are kept in good condition by binding them regularly. Review and discard of obsolete books are carried out periodically.

- Library Policy Link

<http://www.shahandanchor.com/library/wp-content/uploads/library-policy-manual.pdf>

- Classroom Maintenance Policy Link

<https://www.shahandanchor.com/home/wp-content/uploads/Classroom-Maintenance-Policy.pdf>

- Laboratory Maintenance Policy Link

<https://www.shahandanchor.com/home/wp-content/uploads/Laboratory-Maintenance-Policy.pdf>

- Sports Complex Maintenance Policy Link

<https://www.shahandanchor.com/home/wp-content/uploads/Sport-Complex-Maintenance-Policy.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	---	---	---

Financial support from other sources			
a) National	Government Sources	628	3,26,60,367.00
	Private Sector/NGO	9	3,45,000
b) International	---	---	---

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 capability: Soft-Skill Development

Name of the capability enhancement scheme	Date of implementation	Number of students enrolled	Agencies involved
Interview skills	21/07/2018	93	Career Launcher
Student Development Program on 'soft skills'	1/08/2018	168	IBS
Career Guidance session	8/08/2018	213	Mr.Anoy Sengupta, IDP & Mr.Paras Sawant, Erfolg
Employability skills	16/08/2018	17	Growth Centre
Campus to Corporate (c2C)	8/10/2018-10/10/2018	106	Ms. Hansa Joshi
Access to Employability	22/10/2018-24/10/2018	300	Ms. Hansa Joshi
Presentation Skill	13/03/2019	200	Mr. Sheikh Mohd

Name of capability: Remedial coaching

Name of the	Date of	Number of students	Agencies involved
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capability enhancement scheme	implementation	enrolled	
Remedial coaching (ODD)	12/10/18	15	Subject Teacher/Course In-charge
	09/10/18	11	
	06/10/18	158	
	01/09/18	324	
	15/09/18	14	
	25/08/18	23	
	27/08/18	2	
	24/08/18	15	
	23/08/18	34	
	21/08/18	34	
	20/08/18	11	
Remedial coaching (EVEN)	30/03/19	369	Subject Teacher/Course In-charge
	27/03/19	18	
	14/03/19	46	
	13/03/19	67	
	8/03/19	14	
	2/03/19	229	

Name of capability: Language lab

Name of the capability enhancement scheme	Date of implementation	Number of students enrolled	Agencies involved
Language lab	ODD semester A Y 2018-19	881	Language lab faculty

Language lab	EVEN semester A Y 2018-19	881	Language lab faculty
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Name of capability: Bridge courses

Name of the capability enhancement scheme	Date of implementation	Number of students enrolled	Agencies involved
Bridge courses (IoT)	ODD semester A Y 2018-19	148	Batch Mentor, Student coordinator, head of department
Application Server Configuration in Linux	ODD semester A Y 2018-19	10	Coordinators of Professional Body (CSI), Head of Departments, Registered Students
Tensorflow framework for mining	ODD semester A Y 2018-19	30	Coordinators of professional body (CSI), head of departments, Registered students
Attacks & Security In Cyber Era	ODD semester A Y 2018-19	41	Coordinators of Professional Body (CSI), Head of Departments, Registered Students
Ethical Hacking	ODD semester A Y 2018-19	27	Coordinators of Professional Body (CSI), Head of Departments, Registered Students
Matlab For Beginners	ODD semester A Y 2018-19	10	Coordinators of Professional Body (CSI), Head of Departments, Registered Students
Internship: System Administration & Networking	ODD semester A Y 2018-19	63	Departmental faculty
Internship: Design Mania an insight into Arduino and Raspberry Pi	ODD semester A Y 2018-19	26	Departmental faculty

Breadboard Basics &Pspice	ODD semester A Y 2018-19	35	Departmental faculty
Python Lab	EVEN semester A Y 2018-19	143	Batch Mentor, Student coordinator, head of department
Python Web Fraamework	EVEN semester A Y 2018-19	31	Coordinators of Professional Body (CSI), Head of Departments, Registered Students

Name of capability: Mentoring

Name of the capability enhancement scheme	Date of implementation	Number of students enrolled	Agencies involved
Mentoring	A Y 2018-19	1937	Batch Mentor, Student coordinator, head of department

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 by Guidance for Competitive examination	Number of benefited students by Career Counselling activities	Number of students who have passed in the competitive exam	Number of students placed
2018-2019	Placement	Aptitude Training = 641	Resume Writing, GD=475	46	158
		Codevita =330	Session on OOM, RTL Design=333		
		Mocktest =964	IT industry trends and planning IT career=147		
		Online Practice Test-140	Placement Orientation=283		
		Hands on Session on	SDP=480		

		Python=87			
		Inquizitive Mind Test-151	Interview skills, Career Guidance session, Employability Skills=323		
			Placement Orientation=566		
			Alumni Talk=234		
			Training Session=289		
	E-cell	-	1593	-	-
	CSI	-	225	-	-
	ACM	-	38	-	-

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	No. of grievances redressed	Average number of days for grievance redressal
0	0	0

Institute has Grievance redressal committee has agenda to read and understand the mechanism for grievance redressal as per AICTE regulations, and to address the grievances received from students.

5.2 Student Progression

5.2.1 Details of campus placement during the year

On campus			Off Campus		
Name of Organizations Visited	Number of Students Participated	Number of Students Placed	Name of Organizations Visited	Number of Students Participated	Number of Students Placed
Amazon.in	39	0	Acty Systems pvt ltd	*All the	2
TCS Codevita	2	1	Apeksha Films		1
Tata Consultancy	249	58	BlackStraw.ai		1

Services				eligible students according to organization criteria can participate	
Larsen &Tourbo Infotech	210	47	Capgemini & Accenture		1
Dolat Capital Market Private Limited (1904)	45	0	Decimal point analytics andheri		1
CodeArray Technologies Pvt Ltd	267	20	HNR tech		1
TSS consultancy PVT LTD	174	0	Kalsekar Polytechnic		1
NSEIT LTD	262	3	Learning Mate		1
NSEIT LTD	18	0	Nishkaib Solution		1
Vistex Software & Services	71	0	Poel TECHNOLOGY		2
Logixal Solution	78	2	Oneture Technologies		1
Vistaar Technologies	182	3	Smart Infosystems		1
ESDS Software Solution	8	0	Smarte Inc		1
ZARCA Interactive	48	1	Smollan pvt ltd		1
Zeus Learning	73	1	Toppr Technologies		1
Bitwise Global	180	2	Wama Technologies		1
Hexaware	131	3	Clover Infotech		1
Advance Computer Services	98	0	CMS		1
Allerin Talent Management	32	0	Convergys India Services Private Ltd.		1
Wipro	54	4	eClinicalWorks India Pvt. Ltd.		1
SWIGGY	27	0	IMPACT Infotech Pvt. Ltd.		1
Jaro Education	21	0	Intelligence Node		1
Dark Horse	60	4	Kansai Nerolac		1
BYJUS Learning	37	0	KothariTech		1
Pratian Technologies	49	0	KustardTechnologies LLP		1
Datacomp	92	0	Mahavir Consultancy		1
Bitwise	24	1	Mitr Learning & media pvt. ltd		1
Sectona	41	0	mstakx.com		1
Genpact	52	0	Nielsen (I) Pvt. Ltd.		1
Global Space	62	0	Noveltek		1
HDFC Life	26	0	Particle41 India LLP		1

Servosys	44	1	Publicis Group		1
Mirraw	95	0	Reliance JioInfocomm Ltd.		4
IndiaMart	0	0	TSS consultancy Pvt. Ltd.		1
Unicorn Denmart Ltd	0	0	Vedantu Innovations Pvt. Ltd.		1
Mitr Learning & Media	15	0	Zues Learning		
Kotak Life	88	0	Accenture solutions pvt ltd		3
Mphasis	31	0	Cms IT		2
BYJUS	94	1	Commnet Network		1
CMS IT	91	14	Invalue Pvt Ltd		1
Reliance JioInfocomm Limited	64	3	Kids Techie Club		1
CINIF Technologies (1	23	0	PLA electric appliance		1
MaxVal	12	0	Boson Techno Systems		1
Mindtree	41	0	Godrej Infotech		1
CMSS	37	0	Ideal Traders		1
Reliance JioInfocomm Limited	17	1	Netobyte India Pvt Ltd		1
Jaro Education	54	1	RSM Astute Consulting		1
CACTUS	51	0	Tata Consultancy Services		1
MAQ	21	0	Tech Mahindra		1
Reliance Retail Ltd	0	0	-	-	-
Hindustan Times Jumbo Job Mela	67	0	-	-	-
Atos Syntel pool campus Drive	28	5	-	-	-
Course 5i	26	0	-	-	-
TSS Consultancy Pvt. Ltd.	41	0	-	-	-
Zeus Learning	18	0	-	-	-
Toppr.com	23	0	-	-	-
Neyamo Enterprise Solutions Private Limited	42	0	-	-	-
Mitr Learning & Media Pvt. Ltd	2	0	-	-	-
VyomLabs	43	0	-	-	-
Poel Technology	23	0	-	-	-
TJSB Bank	39	0	-	-	-
Godrej Infotech	57	0	-	-	-

Capgemini Off Campus Drive(For Women Only)		1	-	-	-
Indigital technology		2	-	-	-
Logstar		2	-	-	-

5.2.2 Student progression to higher education in percentage during the year

Year	Number of students enrolling into higher education	Programme graduated from	Department graduated from	Name of institution joined	Name of Programme admitted to
2018-19	1	Engineering and Technology	Information Technology	Aegis school of data science	PG in data science
2018-19	1	Engineering and Technology	Information Technology	University of marryland ,College park	Masters in information system
2018-19	1	Engineering and Technology	Information Technology	University of Mumbai, India	MBA
2018-19	1	Engineering and Technology	Information Technology	Deakin University, Geelong, Australia	MS
2018-19	1	Engineering and Technology	Information Technology	Jacobs University Bremen, Germany	MS
2018-19	1	Engineering and Technology	Information Technology	University of Wollongong, Wollongong ,Australia	MS
2018-19	1	Engineering and Technology	Information Technology	University of canberra	Masters in information technology and system

2018-19	1	Engineering and Technology	Information Technology	Clemson university in computer science	Computing and Applied Sciences
2018-19	1	Engineering and Technology	Information Technology	Vivekanand education society institute of mgt study and research	Master of Business Administration
2018-19	3	Engineering and Technology	Information Technology	Rutgers university Newyork	Masters in information technology and analytics
2018-19	1	Engineering and Technology	Information Technology	Full sail university	Game Design
2018-19	1	Engineering and Technology	Information Technology	Oil and Natural Gas Corporation	PG Diploma
2018-19	1	Engineering and Technology	Information Technology	Stevans institute of technolgy	Master of science in information technology
2018-19	1	Engineering and Technology	Information Technology	Griffith college,dublinierland	Big Data Management and Analytics
2018-19	1	Engineering and Technology	Information Technology	Fanshawe school of information technology ,canada	Master of science in information technology
2018-19	1	Engineering and Technology	Information Technology	Dublin business school	Master of Science in Business Analytics
2018-19	1	Engineering and Technology	Information Technology	Institute of insurance and risk mgt, Telangana India	PGDM in Insurance and Risk Management
2018-19	1	Engineering and Technology	Information Technology	University fullerton ,california state	Master of Science

2018-19	1	Engineering and Technology	Information Technology	San francisco state universty	Masters of science in business analytics
2018-19	1	Engineering and Technology	Computer Engg.	Illinois Institute of Technology , Chicago, US	MS
2018-19	1	Engineering and Technology	Computer Engg.	PennState College of Engineering , Pennsylvania, US	MS
2018-19	1	Engineering and Technology	Computer Engg.	University of Florida, US	MS
2018-19	1	Engineering and Technology	Computer Engg.	Monash University,Melbourn e, Australia	MS
2018-19	1	Engineering and Technology	Computer Engg.	Birla Institute of Technology and Science, Pillani, Rajasthan	MBA
2018-19	1	Engineering and Technology	Computer Engg.	University of Technology, Sydney	MS
2018-19	2	Engineering and Technology	Computer Engg.	Northeastern University, Boston, US	MS
2018-19	1	Engineering and Technology	Computer Engg.	National College of IRELAND , Dublin, Ireland	MS
2018-19	1	Engineering and Technology	Computer Engg.	Syracuse University, New York , US	MS
2018-19	1	Engineering and Technology	Computer Engg.	Universityof Southern California,Los Angeles, US	MS

2018-19	1	Engineering and Technology	Computer Engg.	Herbert Wertheim College of Engineering, Florida, US	MS
2018-19	2	Engineering and Technology	Computer Engg.	Fanshawe College Boulevard, Ontario, Canada	MS
2018-19	1	Engineering and Technology	Computer Engg.	California State University	MS
2018-19	1	Engineering and Technology	Computer Engg.	University of Mumbai	ME
2018-19	1	Engineering and Technology	Computer Engg.	University of Wollongong, Australia	MS
2018-19	1	Engineering and Technology	Computer Engg.	Queensland University of Technology, Brisbane, Australia	MS
2018-19	1	Engineering and Technology	Computer Engg.	Stevens institute of technology, New Jersey, United States of America	MS
2018-19	1	Engineering and Technology	Computer Engg.	University of Massachusetts, Boston, United States of America	MS
2018-19	1	Engineering and Technology	Computer Engg.	Macquarie University, Sydney, Australia	MS
2018-19	1	Engineering and Technology	Computer Engg.	Bauhaus University, Weimar, Germany	MS
2018-19	1	Engineering and Technology	Computer Engg.	Deakin University, Australia	MS

2018-19	1	Engineering and Technology	ETRX	K.J.SOMAIYA COLLEGE OF ENGINEERING	ME IN ELECTRONICS
2018-19	1	Engineering and Technology	ETRX	SMU's Lyle School of Engineering, Texas, United States of America	MS
2018-19	1	Engineering and Technology	ETRX	University of Canterbury, Enklad, United Kingdom	MS
2018-19	1	Engineering and Technology	ETRX	ISME School of Management and Entrepreneurship, Mumbai, India	MBA
2018-19	4	Engineering and Technology	ETRX	CDAC,PUNE	PG DIPLOMA IN EMBEDDED SYSTEM DESIGN
2018-19	1	Engineering and Technology	ETRX	NAVINCHANDRA MEHTA INSTITUTE OF TECHNOLOGY AND DEVELOPMENT	MMS
2018-19	1	Engineering and Technology	EXTC	Arizona State University, US	MS in Robotics and Autonomous Systems
2018-19	2	Engineering and Technology	EXTC	Southern Methodist University, US	MS in Telecommunication and Network Engineering
2018-19	1	Engineering and Technology	EXTC	Stevens Institute of Technology, US	MS in computer Engineering

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	No. of Students selected/ qualifying	Registration number/roll number for the exam
IELTS	15	1211
		4270
		359410
		151708
		1685
		R6223913
		14454
		262742
		241848
		003277
		346594
		257772
		Dharmil Shah
		478114
		0022
GRE	23	3691878
		4925120
		3682585
		4869078
		4657128
		4146315
		4318224
		3651249
		3177444

		3605871
		Pranava Shrivastava
		4192315
		3689009
		4642172
		4058857
		4673107
		Neel Visaria
		3734143
		4211604
		3806668
		3689705
		4213503
		3914604
TOFEL	16	34222011
		34260903
		33906254
		34319916
		0000 0000 3410 5989
		34319856
		0000 0000 3379 5323
		0000 0000 3367 9695
		0000 0000 3465 7147
		0000 0000 3406 7782
		0000 0000 3419 5969
		0000000034067812

		0000000034054160
		0000 0000 3437 3124
		0000 0000 34372580
		0000 0000 3437 9072
CET	3	31018236
		31071025
		Rushabh Shah comps
CAT	3	815962
		8088747
		8265485
CDAC	1	191107391
GATE	1	CS19S32050497

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

Activity	Level	Participants
Anchoring	Institute Level	9
Dance	Institute Level	39
Fashion Show	Institute Level	33
Singing	Institute Level	29
Basketball	Institute Level	43

Football	Institute Level	153
Chess	Institute Level	5
Cricket	Institute Level	169
Badminton	Institute Level	41
Throwball	Institute Level	57
Volleyball	Institute Level	102
Athletics Relay	Institute Level	50

5.3 Student Participation and Activities

5.3.1 Number of awards/medals for outstanding performance in sports/cultural activities at national/international level (award for a team event should be counted as one)

Year	Name of the award/ medal	National/ International	Sports	Cultural	Student ID number	Name of the student
2018-19	Basketball	National	Sports		Girls team	
2018-19	8th Indo-Sri lanka karate championship	International	Sports		14562	Ashish Shetty
2018-19	8th Indo-Sri lanka karate championship	International	Sports		14562	Ashish Shetty
2018-19	Hoop the loop	National	Sports		C2016EX1208	Arushishetty
2018-19		National	Sports		12272	Prajktasalunke
2018-19		National	Sports			Akanshachetry
2018-19	Table tennis singles	National	Sports			sagar gala
2018-19	Table tennis doubles	National	Sports			sagar gala

2018-19	Table tennis doubles	National	Sports		13053	Anshved
2018-19	Table tennis singles	National	Sports		13053	Anshved
2018-19	FOOTBALL	National	Sports		11447	Parth Gala
					13287	Aakash Bhatt
					12512	Sanket Patil
					14429	Kritik Rathod
					12471	Ravnit Sehgal
					13138	Dipanshu So meshawar
					13977	Vinit Bhanushali
					13886	Alpesh Mharaniya
					13969	Danish Siddique
					13339	Sarvesh Saple
					14035	Dishant Vakte
					12425	Pradnyal Gandhi
					13227	Shrey Dedhiya
					13968	Aditya Pawar
13367	Narendra Rawal					
13965	Ahhishek Bhosale					
2018-	Dance	National		Cultural	13194	Bhavya Patel

19					13160	SayliLokhande
					12228	Harshada Debnath
					13968	Aditya Pawar
					13100	Pranav Udani
					14429	Kritik Rathod
					14658	Anushka Chaubey
					14456	Jupjyot Khosla
					14276	Moksha Doshi
2018-19	Dance	National	Cultural	13194	Bhavya Patel	
				13160	SayliLokhande	
				12228	Harshada Debnath	
				13968	Aditya Pawar	
				13100	Pranav Udani	
				14429	Kritik Rathod	
				14658	Anushka Chaubey	
				14456	Jupjyot Khosla	
14276	Moksha Doshi					

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

SAKEC aims for all round development of students and hence has established a student council at

institute level. The primary objective of creating a Student Council is to assimilate and integrate the students from all the constituent departments to provide them with a platform to harness their creative activities in an integrated manner. The Student Council mainly promotes collective and constructive leadership within the student community. Each year, class representatives are selected from the academically good students, General secretary is elected through election amongst the class representatives while the Sports and Cultural Secretary along with the ladies representatives.

The Student council, being the apex body organizes various activities with the help of the other cells. These student body Cells along with the student council keep students engaged in activities apart from their regular academic work and showcase their talents. The students also get an opportunity to attend the seminars and Workshops of eminent personalities that are held all-round the year by various cells of the institute.

Pixel, Nucleus - the technical fest, and Prathistha – the cultural fest are some of the most looked upon events that enrich the experience of the student's community. These events provide a platform for the students to showcase their talents and nurture them. They help in the development of the Institute and society by conducting various interactive programs with the faculty, administrative staff, and students.

Apart from these, we have events and competitions conducted by the various Cells which keep the students active throughout the year. To strengthen curriculum, delivery strategies and activities, college constituted a Department Advisory Board (DAB) which comprises students representative along with representatives from various industries, organizations and stakeholders of the institute thereby generating a mechanism for providing precious and valuable inputs to various departments at the institute. The institute has an Anti-Ragging Committee to ensure that measures for prevention of ragging and monitoring mechanisms are in place. The Committee comprises representatives of students belonging to the fresher's category as well as senior students.

SAKEC provides holistic learning experience to develop managerial capabilities of its graduates. It has well defined processes in place to help students develop their leadership and decision-making skills. It encourages student participation in various domains and has a plethora of cells and committees dedicated to providing the students with means to express their talents. Several events are organized by various cells under the guidance of faculty in charge. Students participate in several co-curricular activities. Such an engagement facilitates overall grooming, and the college encourages all these co-curricular activities and actively supports them. Every student cell is assigned to faculty in charge and the faculty provides guidance and mentoring support to the student clubs. The following cells facilitate student development under the mentorship of the respective faculty in charge.

- Student Council
- IEEE Student Branch
- IETE Student Forum
- ACM Student Chapter
- CSI Student Chapter
- IIC SAKEC 2.0
- SAKEC Robo-Club

- SAKEC E-Cell
- Research Cell
- Speakers Club
- Sambhodhi

5.4 Alumni Engagement

5.4.1 Whether the institution has registered Alumni Association?

No (Registration is in Process)

5.4.2 No. of enrolled Alumni:

No

5.4.3 Alumni contribution during the year (in Rupees):

Nil

5.4.4 Meetings/activities organized by Alumni Association

Shah & Anchor Kutchhi Engineering College – SAKEC celebrate Annual Alumni meet “SAMPARKA” every year. SAMPARKA gives every SAKEC alumni to interact with other alumni members and their teachers. They can share their experience in the outside world, which they faced after stepping out of the institution. This also help the present students of the institution to network with the like-minded alumni and get inspired by them. In SAKEC alumni members also contribute to their alma matters by giving talks, conducting workshop and seminars.

They also provide career guidance, encouragement during the academic program, advice on important course and field work, and opportunities to make professional contacts. Some of the alumni also help the current students to get internships in their own organisations or helped them in getting good internships in other organisations. For details of SAMPARKA -2018 [click here](#).

Sr.No.	Alumni Name	Activity	Date
1	Mr.GandharSuryavanshi	Alumni Talk	16/08/2018
2	Mr. Dhruva Mota	Pixel	26/3/2019
3	Mr. Viral Vora	Pixel	26/3/2019

CRITERION VI – GOVERNANCE, LEADERSHIP AND MANAGEMENT

6.1 Institutional Vision and Leadership

Shah and Anchor Kutchhi Engineering College was established in 1985 for the purpose of imparting quality technical education. The college is managed by Mahavir Education Trust. The college is approved by AICTE, New Delhi and Government of Maharashtra, and is affiliated to University of Mumbai. It also has an ISO Certification. It offers under graduate courses in Computer Engineering, Information Technology, Electronics Engineering and Electronics & Telecommunication Engineering.

Our Vision -

“To become a globally recognized institution offering quality education and enhancing professional standards”

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

Shah and Anchor Kutchhi College of Engineering promote and practices decentralization in all academic and administrative activities. It has various academic and administrative committees to monitor, plan and execute smooth functioning of the Institute. Institute has Local Management Committee (LMC) body comprising of management board, Principal, Staff, support staff, student, parents representatives. Once a year LMC meeting is conducted where activities and results of previous year are discussed and action plan for next academic year is decided.

Apart from LMC meeting the institute also conducts regular meetings of staff with Principal and HODs. Work allotment and proper distribution of load is done during these meetings. Opinions and ideas from the staff are sought. There are In charges for every professional body, and the respective In-charge, with the help of his team, decides the plan of activities for every semester. Various bodies like IEEE, IETE, ISTE, ACM, etc operate independently for the benefit of staff and students.

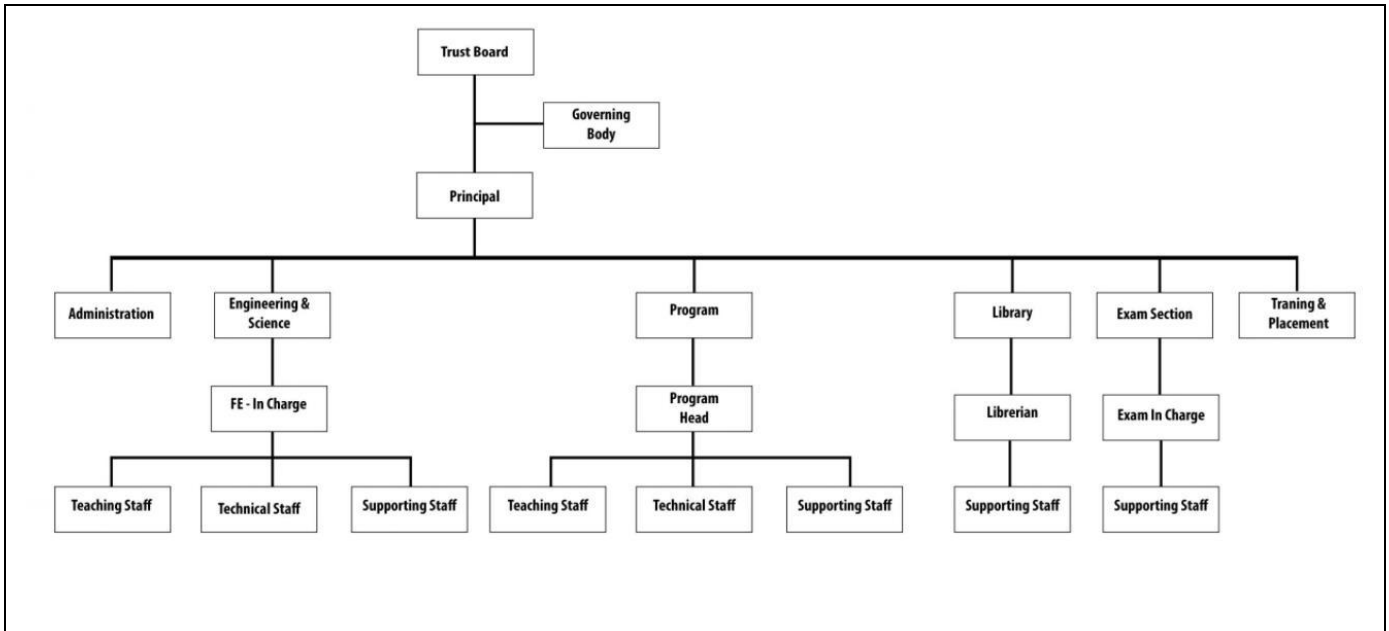
Institute has well organized procedure for purchase of equipment and consumable materials/components.

Requirements are submitted by the subject in-charge to the HOD, quotations are ordered for the purchase by HOD after obtaining approval from the Principal, funds are provided by management.

Conduction of Examinations and evaluation of Answer books and preparation of Results are implemented examples of decentralization wherein conduction of Examination is facilitated through senior Supervisors, overseen by the In-charge Examination and Evaluation of Answer Books are facilitated through CAS (Centralized Assessment Scheme) In-charges and overseen by In-Charge Examination.

The above processes are the examples of decentralization and participative management, as a result of which we ensure their smooth execution.

SAKEC is managing through Governing body, administrative setup, functions of various bodies, service rules, procedures, recruitment and promotional policies .Hierarchy is shown below:



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

Yes/No/Partial:

Yes, we have institute level ERP System where staff attendance, student attendance, exam functions, student fees, Examination fees and all are managed through software.

We have Met-smart web portal which lets both staff and students log into it. The staff members can retrieve information about leaves, attendance, and leave applications. Staff can enter student attendance also send SMS to concerned students regarding important information.

Academic calendar, Timetable, Student roll call lists, notifications related to students' fee, upcoming events and examination are posted well in advance on institute website. Information regarding different student chapters and cell are available on Website.

Students have to fill on-Line Exam forms for the University Level Exams (Semester- 1, 2, 7&8). College ERP is well built to handle the College Level Exams. Hall tickets are also auto generated by the College ERP. Internal Assessment, Term Work, Oral and Practical marks are uploaded by the respective internal examiners in the College ERP.

Computer department also has Departmental Information Management system. Departmental Information Management System. DIMS-V2 is updated with additional functionalities such as lab attendance and mentee information in which we can see mentees list of respective mentor along with attendance record and internal assessment marks.

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):

❖ Curriculum Development

- Curriculum is designed by the University of Mumbai. Curriculum consists of courses (subjects) for all four years of the Bachelor of Engineering program. Every course scheme includes module-wise contents. According to the revised syllabus, every module is mapped with Course Outcomes.

- Faculty of our institution participate in Syllabus and Scheme design programmes conducted by the university.
- Our institution also conducts orientations of new subjects and syllabus on behalf of Mumbai University. All members discuss about curriculum, books, tentative experiments etc.
- Staffs from our institution are deputed to other colleges to participate in orientation courses for new subjects.
- Domains are created based on the area of specialization of faculty, domains are allocated to them and the Domain In-charges supervise the courses under each domain.
- Domain in charge identifies gaps in syllabus. Domain in charge informs GAPS in syllabus to Mumbai University and corrective measures are taken. At our college we include Assignment, Quiz or other ICT methods like Think Pair and Share, to fill the gaps in syllabus.
- Beyond the curriculum, Industrial Visits, Internship, Smart India Hackathon, Workshop, Seminars, Project Competitions are organised.

❖ Teaching and Learning

Processes followed to improve quality of Teaching & Learning

● Academic Calendar

The Academic Calendar of the Institute is based on the academic calendar of Mumbai University. The Calendar includes the activities planned for the Program. The staff members and students adhere to the calendar of events to meet the department's planned events

o Interactive Classrooms- Improvements in technology make teaching effective. Faculty members prepare PowerPoint presentation of the contents for the course and teach the students using Projector and Surface Pro. The students understand the subject in a better way when the faculty members use both blackboard and projector as the teaching aids.

o Teaching /Learning Resources-

- To improve the teaching/learning process, some of the faculty members use Google Classroom for their respective courses.

- Quiz and Assignments are conducted using Learning Management System (LMS)

- The faculty members also share their notes with the students.

- Providing resources by NPTEL, Spoken Tutorial and Digital library. Students are aware and utilize the expertise of academic excellence available on other platforms outside the classroom.

o Information and Communication Technology (ICT) usage: Students are provided with knowledge and proficiency in the usage of simulation softwares like SPSS Clementine, MATLAB, NS2 etc. which are also available for students. Students are well trained to use these tools and softwares in the laboratory.

o Innovative practices in Teaching and Learning: For Innovation in teaching and learning process faculty use different teaching methodologies like Think Pair Share to interact with students and relate to the course in a better way

● Methodology to support weak students and encourage bright students

o Support weak students

- Remedial lectures are conducted by the faculty to support weak students.

- Mentors counsel weak students to improve their overall performance.

o Encourage bright students

- Meritorious students are awarded gold & silver medals every Academic year.

- Students are encouraged to participate in various competitions (Smart India Hackathon, Technical paper publications and Project competitions)
- Various Student Chapters viz. IEEE, ACM, CSI, ISTE, IETE are formed to encourage students to participate in various events.
- Special Study Group (Cyber Security and Forensic Specialist Study Group, Internet of Things (IoT) Study Group, and AI & Deep learning) are formed for a specialized area of learning where students & faculty interact and share knowledge.

❖ Examination and Evaluation

● **Internal semester Question paper**

- The internal assessment is scheduled as per the academic calendar.
- After the assessment, solution & marking scheme is prepared. The papers are assessed as per the marking scheme.
- The papers are shown to the students & doubts regarding the evaluation are resolved.

● **Assignment**

- In class Assignments are given to the students for assessing their knowledge on different topics. Course Co-ordinator prepares the assignment according to the lesson plan and subject matter covered. The assignment questions are mapped to COs.
- The literature survey is an indirect activity for students which promote self-learning through the usage of the digital library. Assignments are given with respect to the Literature Survey.
- Our institute declares result of end semester examination of semester III,IV,V, VI within one month of last paper with zero errors.

Every year top students of every department are felicitated by Gold Medals and Silver medals. Individual subject toppers are also rewarded with certificates.

❖ Research and Development

The institute has constituted a research cell, research committees to monitor and address the issues related with the research.

Various internship opportunities from industry and projects are provided to the students to enhance their research and professional skills.

It also ensures that the necessary research facilities and infrastructure is available. The committee also ascertains the quality of the research work being communicated by the students to the various referred journals and see to it that it is free from any sort of plagiarism using Urkund Tool.

Many of our projects offer opportunities in fundamental research that are focused to tackle live problems. The projects under the banner of SAKEC Research Cell work for the benefit of industry and society. We have projects in collaboration with various organizations such as Bombay Leprosy Project (BLP), Roti Bank Mumbai, Waggy Tails Private Limited, Digital Freedom Foundation (DFF).

❖ Library, ICT and Physical Infrastructure / Instrumentation

- **Library:** College library resources comprises of Reference Books, magazine, journals, compact disc systems & Digital Library facilities. Library has Internet facility centre for student. The institution provides online subscriptions for IEEE, ScienceDirect, ASTM, JGATE, SPRINGER, SCOPUS, Videeya Ebooks & MCGRAW-HILL BOOKS. Syllabus and Previous year University Question Papers. Online Repository of course material. Library is a source of variety of books related to curricular and co-curricular. It also consists of periodicals which are helpful to students for self learning.

- **Information and Communication Technology (ICT) usage:**

ICT facility is extended for the Teaching-Learning Process by means of LCD-Projectors, Smart Classrooms, 100 Mbps leased Line Connectivity with WiFi.

Infrastructure: Keeping in-line the Vision and Mission of the Institute, the Institute strives to create an excellent academic environment. In addition to well-equipped laboratories and motivated teachers, facilities like LED TV displays, CCTV Surveillance, Public Addressing System, Intranet, WiFi access, Girls Common Room, Gymnasium, Canara Bank and study areas are present in the campus.

Facilities for Cultural, Sports and Technical events are provided by the institute. The establishment of a digital library, various Student Chapters, Student Council, various cells are initiatives taken by the institute towards achieving the vision of the institute.

- **Auditorium**

SAKEC provides state of the art auditorium with a seating capacity for 250+ people that act as a common ground for students, faculty and corporate personalities for regular interface, conference and other events.

- **Seminar Hall**

To promote e-based teaching-learning methodology, air-conditioned Seminar Rooms are constructed at our College. The advancements in technology have benefited one and all. Our students and faculty are no exception. They use the latest multimedia system with large digital screens to display their visually based demonstrations and graphics oriented lessons. SAKEC organizes online lectures and conferences with eminent professors and stalwarts across the globe in various fields of Engineering and Technology for the overall development of students.

- **Gymnasium**

Our modern gymnasium has state of the art equipment, an air conditioned environment and is fully supervised at all times & features specialist equipment for users. The SAKEC gymnasium is a full-service fitness facility available to the students free of cost.

- **Girls Common Room**

SAKEC provides a large state-of-art separate female student common area, allowing freedom for students to socialise and catch up with assignments. Within the student common area, there are gym equipment with professional sports trainer to live fit and healthy. Additionally, the college offers a self-contained microwave oven and kettle.

- **Bank**

Canara Bank has its own extension counter specially for SAKEC Staff and students, within the campus. It is accessible easily and the staff and students of the institution can conveniently complete all their bank transactions.

- ❖ **Human Resource Management**

In Institute recruitment is done as per norms and regulation as recommended by Govt. of Maharashtra. There are two types of recruitments for teaching staff, one is through USC (University Selection Committee) and the other is at the College Level (Ad-hoc appointments) against the sanctioned vacancy. The vacancies are advertised in national and local news papers and interviews are conducted by eminent panel of experts. Recruitments of security, cleanliness staff is outsourced to agencies.

As per Maharashtra government norms, gratuity, provident fund, medical insurance and Group medical Insurance is given to teaching and non-teaching Staff.

To encourage higher studies and to enhance academics as well as the career of teaching and nonteaching staff leave facility is given to deserving candidates wanting to pursue higher studies.

To encourage extra co-curricular activity all staff members are allowed to participate in college sports and Cultural activities. To encourage the faculty members to participate in Research and Development activity, sponsorship is provided for participation in workshops and conferences as per policy.

- ❖ **Industry Interaction / Collaboration**

Industrial visit is a part of college co-curriculum during which students visit companies and get insight regarding the functioning of the industry.

Every department has an advisory board which has experts from the industry to bridge up the curriculum/ industry gap and suggest quality improvement.

Experts are invited from various MNCs and other industries to deliver lectures on recent trends.

Students are encouraged to do outhouse projects and to participate in different competitions to get industrial exposure.

Industry-academia interactions are further strengthened by sending the students for internship in companies.

E-cell /Industry Institute cell, T&P cell, Research cell and all Professional bodies in the institute take care of all the activities related to industry interaction

- ❖ **Admission of Students**

- Admission to the Institute is done by Directorate of Technical Education (DTE) Maharashtra wherein 80% of the Intake Capacity of each branch is facilitated through DTE's Centralised Admission Process (CAP). Remaining 20% of the Intake capacity is filled in through the Institute Level quota, following all the rules and regulations stipulated by DTE, Mumbai for the year. For admission to institute quota advertisement is given in newspapers. Based on applications received merit list is prepared and students are admitted on the basis of merit. Student eligible for government scholarship and free ships are facilitated through the complete online application process.

- 51% of the students are admitted through Minority quota (Kutchhi Jain)

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

❖ Planning and Development

Academic calendar, Timetable, Student roll call lists, notifications related to students fee, upcoming events and examination are posted well in advance on institute website. Information regarding different student chapters and cell are available on Website .

<https://www.shahandanchor.com/home/academic-calendar/>

❖ Administration

We have Metsmart web portal which lets both staff and students log into it. The staff members can retrieve information about leaves, attendance, leave applications. Staff can enter student attendance also send SMS to concerned students regarding important information.

Biometric attendance system is used for recording in and out timing of staff members.

Institute has a strong surveillance system. CCTVs are installed on all corridors, rooms, Exam section, laboratories, Library. Video footage from CCTVs are constantly monitored in order to avoid any unwanted incidents and to secure the campus.

https://www.shahandanchor.com/metsmartcampus/MET_Modules.aspx

❖ Finance and Accounts

Student Fees, exam fees and all other payments are collected through online payment options.

<https://www.onlinesbi.com/sbicollect/icollecthome.htm?corpID=654922>

The staff salary is transferred to the bank salary account online and the payslip is forwarded to all by e-mail.

❖ Student Admission and Support

Institute has software which facilitates whole admission process. Registration of student's application forms is done through this software wherein all details pertaining to marks, category, CET score along with personal details are entered. For students admitted through centralised admission process of DTE, admission letter mentioning list of original documents accepted by college is generated. This helps in maintain students record for all four years and thereafter.

Fee receipt is also generated through the software after complete admission process.

For institute level seats and vacant seats advertisement is given in the news paper and received application form are entered and process through softwares. Based on merit list generated by the program students are admitted. This provides transparency in admission process.

Students Identity card is also generated through software.

<https://www.shahandanchor.com/metsmartcampus/default.aspx>

❖ Examination

Students have to fill on-Line Exam forms for the University Level Exams (Semester- 1,2,7&8). College ERP is well built to handle the College Level Exams. Hall tickets are also auto generated by the College ERP. Internal Assessment, Term Work, Oral and Practical marks are uploaded by the respective internal examiners in the College ERP.

Institute's Examination Cell is fully equipped to receive e-Question papers forwarded by University of Mumbai Exam Cell.

❖ **Library, ICT and Physical Infrastructure / Instrumentation**

• **Library:** College library resources comprises of Reference Books, magazine, journals, compact disc systems & Digital Library facilities. Library has Internet facility centre for student. The institution provides online subscriptions for IEEE, ScienceDirect, ASTM, JGATE, SPRINGER, SCOPUS, Videeya Ebooks & MCGRAW-HILL BOOKS. Syllabus and Previous year University Question Papers. Online Repository of course material. Library is a source of variety of books related to curricular and co-curricular. It also consists of periodicals which are helpful to students for self learning.

• **Information and Communication Technology (ICT) usage:**

ICT facility is extended for the Teaching-Learning Process by means of LCD-Projectors, Smart Classrooms, 100 Mbps leased Line Connectivity with WiFi.

Infrastructure: Keeping in-line the Vision and Mission of the Institute, the Institute strives to create an excellent academic environment. In addition to well-equipped laboratories and motivated teachers, facilities like LED TV displays, CCTV Surveillance, Public Addressing System, Intranet, WiFi access, Girls Common Room, Gymnasium, Canara Bank and study areas are present in the campus.

Facilities for Cultural, Sports and Technical events are provided by the institute. The establishment of a digital library, various Student Chapters, Student Council, various cells are initiatives taken by the institute towards achieving the vision of the institute.

• **Auditorium**

SAKEC provides state of the art auditorium with a seating capacity for 250+ people that act as a common ground for students, faculty and corporate personalities for regular interface, conference and other events.

• **Seminar Hall**

To promote e-based teaching-learning methodology, air-conditioned Seminar Rooms are constructed at our College. The advancements in technology have benefited one and all. Our students and faculty are no exception. They use the latest multimedia system with large digital screens to display their visually based demonstrations and graphics oriented lessons. SAKEC organizes online lectures and conferences with eminent professors and stalwarts across the globe in various fields of Engineering and Technology for the overall development of students.

• **Gymnasium**

Our modern gymnasium has state of the art equipment, an air conditioned environment and is fully supervised at all times & features specialist equipment for users. The SAKEC gymnasium is a full-service fitness facility available to the students free of cost.

● **Girls Common Room**

SAKEC provides a large state-of-art separate female student common area, allowing freedom for students to socialise and catch up with assignments. Within the student common area, there are gym equipment with professional sports trainer to live fit and healthy. Additionally, the college offers a self-contained microwave oven and kettle.

● **Bank**

SAKEC campus has a branch of Canara Bank in its campus especially for SAKEC Staff and students. It is accessible easily and the staff and students of the institution can conveniently complete all their bank transactions.

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

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
Milind Khairnar	Workshop on Artificial Intelligence and Deep Learning, FRCRCE, Bandra, Mumbai (21 to 23/07/2018)	-	5310
Milind Khairnar	Inspiring Engineers through Innovation, Creative Models and Machines, IIT Gandhinagar (08 to 12/01/2019)	-	8660
Milind Khairnar	Advanced Engineering Optimization through Intelligent Techniques, SVNIT, Surat (13 to 17/05/2019)	-	4803
Milind Khairnar	Fees paid for NPTEL Course Exam of Ethical Hacking	-	1100
Milind Khairnar	Mentorship Training Program, AICTE Headquarters, New Delhi (09 and 10/09/2019)	-	7501
Manoj Dhande	Hackathon travelling expenses	-	20985
Tejas Hirave	IEEE 4th international Conference on Computing Communication Control AndAutomation(ICCUBEA),PunePaper publication	-	5500
Priyanka Singh	Industrial Automation Hands On	-	2625
B. Mathew	Symposium on NAAC Accreditation	-	200
Dr.Uma Rao	STTP On Pedagogy for Effective	-	1000

	Integration of Information and Communication Technologies (ICT) in Engineering Educationj		
Ms. Vidya Gogate	STTP On Pedagogy for Effective Integration of Information and Communication Technologies (ICT) in Engineering Educationj	-	1000
Mr.Nandkishor .S. Narkhade	STTP On Pedagogy for Effective Integration of Information and Communication Technologies (ICT) in Engineering Educationj	-	1000
Ms. Asha Vijay Durafe	STTP On Pedagogy for Effective Integration of Information and Communication Technologies (ICT) in Engineering Educationj	-	1000
Ms. Rameshwari S. Mane	STTP On Pedagogy for Effective Integration of Information and Communication Technologies (ICT) in Engineering Educationj	-	1000
Ms. Salabha Joy Jacob	STTP On Pedagogy for Effective Integration of Information and Communication Technologies (ICT) in Engineering Educationj	-	1000
Ms. Shubhangi D. Motewar	STTP On Pedagogy for Effective Integration of Information and Communication Technologies (ICT) in Engineering Educationj	-	1000
Ms. Manisha Mane	STTP On Pedagogy for Effective Integration of Information and Communication Technologies (ICT) in Engineering Educationj	-	1000
Ms. Aparajita Bera	STTP On Pedagogy for Effective Integration of Information and Communication Technologies (ICT) in Engineering Educationj	-	1000
Ms Shikha Shrivastava	STTP On Pedagogy for Effective Integration of Information and Communication Technologies (ICT) in Engineering Educationj	-	1000
Mr. Amit Tiwari	STTP On Pedagogy for Effective Integration of Information and Communication Technologies (ICT) in Engineering Educationj	-	1000
Ms. Priyanka Singh	STTP On Pedagogy for Effective Integration of Information and Communication Technologies (ICT) in Engineering Educationj	-	1000
Ms.Pooja Polshetwar	STTP On Pedagogy for Effective Integration of Information and Communication Technologies (ICT) in Engineering Educationj	-	1000

Mr. Babychen Mathew	STTP On Pedagogy for Effective Integration of Information and Communication Technologies (ICT) in Engineering Educationj	-	1000
Mr. Prashant Khedkar	STTP On Pedagogy for Effective Integration of Information and Communication Technologies (ICT) in Engineering Educationj	-	1000
Ms. Sarika Bukkawar	STTP On Pedagogy for Effective Integration of Information and Communication Technologies (ICT) in Engineering Educationj	-	1000
Ms. Manjusha Kulkarni	STTP On Pedagogy for Effective Integration of Information and Communication Technologies (ICT) in Engineering Educationj	-	1000
Ms. Madhura Pednekar	STTP On Pedagogy for Effective Integration of Information and Communication Technologies (ICT) in Engineering Educationj	-	1000
Ms. Jayshree Bhole	STTP On Pedagogy for Effective Integration of Information and Communication Technologies (ICT) in Engineering Educationj	-	1000
Dr. Rekha Ramesh	STTP On Pedagogy for Effective Integration of Information and Communication Technologies (ICT) in Engineering Educationj	-	1000
Ms. Gauri Chavan	STTP On Pedagogy for Effective Integration of Information and Communication Technologies (ICT) in Engineering Educationj	-	1000
Ms. Uma Raj	STTP On Pedagogy for Effective Integration of Information and Communication Technologies (ICT) in Engineering Educationj	-	1000
Mr. Shashikant Radke	STTP On Pedagogy for Effective Integration of Information and Communication Technologies (ICT) in Engineering Educationj	-	1000
Mr. Gopal Nanda	STTP On Pedagogy for Effective Integration of Information and Communication Technologies (ICT) in Engineering Educationj	-	1000
Dr. Archana Nath	FDP on Transforming higher Education Milieu- Towards Excellence	-	4250
Dr. Smita Srivastava	FDP on Transforming higher Education Milieu- Towards Excellence	-	4250
Prof. Swati Nadkarni	FDP on Medical Image Computing: Machine Learning Methods and Advanced-MRI Applications	-	4,425

Dr. Kranti Gagh	Workshop on AI and Deep Learning	-	600
Ms. Archana Chaugule	Course on Internet of Things	-	4,425
Prof. Abirami Sivaprasad	Paper Publication	-	5,625
Dr. Nilakshi Jain	Workshop on IIC-SAKEC	-	24,365
Ms. ManyaGidwani	STTP on Using R for data visualization and analytics	-	6,637
Ms. Smita Bansod	Course on Internet of Things	-	4,425
Dhanashree Toradmalle	Sstp "Recent Trends in IoT"	-	1300
Jalpa Mehta	Sstp "Recent Trends in IoT"	-	1300
Archana Chaugule	Sstp "Recent Trends in IoT"	-	1300
Nilakshi Jain	Sstp "Recent Trends in IoT"	-	1300
Smita Bansod	Sstp "Recent Trends in IoT"	-	1300
Lukesh Kadu	Sstp "Recent Trends in IoT"	-	1300
ManyaGidwani	Sstp "Recent Trends in IoT"	-	1300
Manish P. Bhelande	Sstp "Recent Trends in IoT"	-	1300
Ashwini Deshmukh	Sstp "Recent Trends in IoT"	-	1300
TheresBemilla	Sstp "Recent Trends in IoT"	-	1300
Bhargavi Dalal	Sstp "Recent Trends in IoT"	-	1300
Rashmi Malvankar	Sstp "Recent Trends in IoT"	-	1300
DhwaniketKamble	Sstp "Recent Trends in IoT"	-	1300
Panjab Mane	Sstp "Recent Trends in IoT"	-	1300
Harish Motekar	Sstp "Recent Trends in IoT"	-	1300
Santosh Rathod	Sstp "Recent Trends in IoT"	-	1300
Jahanvi Gupta	Sstp "Recent Trends in IoT"	-	1300
Kranti Ghag	Sstp "Recent Trends in IoT"	-	1300
Akshata Patil	Sstp "Recent Trends in IoT"	-	1300
Prof. Swati Nadkarni	Sstp "Recent Trends in IoT"	-	1300
PranaliWagh	Sstp "Recent Trends in IoT"	-	1300
Abirami Sivaprasad	Sstp "Recent Trends in IoT"	-	1300
Swati Gajbhiye	Sstp "Recent Trends in IoT"	-	1300
Chetan Mahajan	Sstp "Recent Trends in IoT"	-	1300

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	Dates (from-to)	No. of participants (Teaching staff)	No. of participants (Non-teaching staff)
2018-19	STTP on Advanced VLSI design and Applications with	-	25 th to 30 th Jun	12	2

	hands on in CADENCE toolset.		2018		
	STTP on Recent Trends in IOT	-	2 nd to 7 th Jan 2019	28	-
	STTP on Pedagogy for effective Integration of Information and communication Technologies in Engineering Institution	-	3 rd to 8 th May 2018	35	-
	Two Days workshop on Diving into deep learning	-	1 st to 2 nd Sep 2018	01	-
	Short Term Training program on Web Technologies-New Trends	-	2 nd to 7 th Jul 2018	56	-
	Orientation Program on Theory of computer Science	-	13 th Jul 2018	28	-
	Faculty Development Program on "Data Center Technologies-Need of this Hour"	-	29 th Sep 2018	33	-
	Faculty Development Program on Machine Learning with Python	-	19 th Jan 2019	15	-
2018-19	Faculty Development Program on Creating effective educational videos	-	16 th Feb 2019	23	-
	Role of Teachers of the future (IT)	-	24 th Aug 2018	25	-
	Urkund Anti-plagiarism Service	-	30 th Jan 2019	42	-
	Faculty Development Program on Machine Learning (ETRX)	-	2 nd and 16 th Mar 2019	25	-
	Faculty Development Program on Introduction to photoshop	-	2 nd Sep 18 th and 6 th Oct 2018	28	-
	Python Workshop for Teachers (IITB remote center workshop)	-	22 nd Jun 2019	26	-
	Introduction to deep learning, Manthan Series	-	19 th Oct 2018	20	-
	-	Self Defence for women	4 th to 7 th Jan 2019	40	10
	-	Elsevier Mendely training session	12 th Feb 2019	11	2

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	Date and Duration (from – to)
STTP on Recent Trends in IOT	28	2 nd to 7 th Jan 2019
Appreciation Certificate for National Event Leaders in Action	02(/KG,/AB)	3 rd July 2018
International conference on Technology & Information Technology 2019 member of panel	01(/NJ)	12 th Jan 2019
IETE SAKEC Coordinated and participated in two day workshop on IOT	04(/AC,HM,SR,/SSB)	21 st to 22 nd July 2018
Artificial Intelligence day	01	1 st Sept 2018
Participated in Two Days workshop on Diving into deep learning	01	1 st Sept to 2 Sept 2018
Short Term Training program on Web Technologies-New Trends	56	02 nd to 07 th Jul 2018
Orientation Program on Theory of computer Science	28	13 th Jul 2018
Faculty Development Program on "Data Centre Technologies-Need of this Hour"	33	29 th Sept 2018
Faculty Development Program on Machine Learning with Python	15	19 th Jan 19
Faculty Development Program on Creating effective educational videos	23	1 st Feb 19
STTP on Electronic Product Design	1	9 th to 14 th Jun 19
Orientation Program inn DLIC (ETRX)	1 PGK	12 th Jul 18
Orientation Program in Digital communication(ETRX)	1 RM	16 th Jul 18
Orientation Program in EEM (ETRX)	1AB	12 th Jul 18
Orientation Program in MPA (ETRX)	1AN	19 th Jan 19
Orientation Program in MPA (ETRX)	1MAP	19 th Jan 19
Orientation Program in Embedded Systems and RTOS (ETRX)	1PP	17 th Jan 2019
Symposium on measures for quality enrichment and sustenance in higher educational institutions	1	18 th JAN 19
NAAC revised Accreditation frame work, new initiatives and reforms	1	15 th Feb 19
Faculty Development Program on Machine Learning (ETRX)	25	2 nd and 16 th Mar 2019
Faculty Development Program on Introduction to Photoshop	28	2 nd sep 2018 and 6 th oct 2018
Orientation Program of Digital Communication.	1	6 th Jul 2018
Orientation Program of DBMS	1	18 th Jan 2019
Orientation of Sem v Microelectronics	1	9 th Jul 2018
Orientation for Digital VLSI	1	11 th Jan 2019

Orientation program for “Microprocessor& peripherals Interfacing” – Sem V	1	18 th Jul 2018
Orientation on Image Processing and Machine Vision	1	10 th Feb 2019
One Day Orientation Programme for Open Source Technology for Communication Lab	1	10 th Jul 2018
Orientation for Antennas and Radio Wave propagation	1	12 th Feb 2019
STTP on Transforming Higher Education Milieu -Towards Excellence, SIES Nerul	1	27 th April to 10 th May 2019
Contemporary Trends and Practices in Inter-personal Communication and Business Arbitration", Nerul	1	27 th April-10 th May 2019

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

	Teaching		Non-teaching	
	Permanent	Fulltime(ad-hoc)	Permanent	Fulltime/temporary
Total	89	47	12	8

6.3.5 Welfare schemes for

Teaching	<ol style="list-style-type: none"> 1. PF Facility is implemented as per government norms 2. Gratuity is also implemented for the retiring staff members 3. Group Insurance 4. Book Allowance of 1000/- per year
Non-teaching	<ol style="list-style-type: none"> 1. PF Facility is implemented 2. Gratuity is also implemented for the retiring staff members 3. Group insurance is implemented 4. Medical allowance
Students	<ol style="list-style-type: none"> 1. Insurance is facilitated 2. Flexibility of Fees Payment in instalments is extended to needy Students

6.4 Financial Management and Resource Mobilization

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

Shah and Anchor Kutchhi Engineering College does internal and external audit regularly. Internal audit is done in account section wherein cash transactions are verified on daily basis by cashier. Bank statements, cheque issuance records are also verified. Institute prepares financial budget for particular academic year by taking into considerations of all HOD's and heads of various cells which is approved by principal. Auditing of all financial transactions are done by in charges of various chapters such as ISTE, IETE, IEEE, ACM, CSI. Most of the transactions are in non-cash mode like salary of all

employees is directly credited to respective bank accounts.

Also student fee is collected by Demand Draft for first year and through NEFT for rest of the years.

External audit is done by Chartered Accountant Mr. Jay Dedhia along with his staff. Income expenditure statements, cash payments, bills, purchase orders all are verified by external auditor. External auditing is done as per norms. Audited statements are considered for approving college fee by Shikshan Shulk Samiti and verified by office of Director of Technical Education(DTE) Maharashtra state. Institute has maintained very good record of depositing staff salary on first day of every month into bank account. SAKEC is proud to say that no audit objection has ever been reported since establishment of institute. Regular monitoring of fund flow helps to maintain the financial health of the college.

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/ Grants received in Rs.	Purpose
NA	NA	NA

6.4.2 Total corpus fund generated :
NIL

6.5 Internal Quality Assurance System

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

Audit Type	External		Internal	
	Yes/No	Agency	Yes/No	Authority
Academic	Yes	LIC,ISO, NBA	Yes	ISO
Administrative	Yes	LIC,ISO,NBA	Yes	ISO

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

Parent meetings are conducted bringing parents into the mentoring system as key stakeholders to create an environment for open interaction and reflection not only with the mentee but with his/her parents too. Through parent teacher meeting one of the parent made us available internship opportunity in National Informatics Centre (NIC) and every year students are selected for internship through proper selection process.

One parent is in every DAB committee and their feedbacks are taken into consideration and accordingly teaching learning process is updated.

6.5.3 Development programmes for support staff (at least three)

SAKEC Library organised a session on Mendeley Reference management tool , which is product of Elsevier on 12th February 2019. Teaching, nonteaching staff members attended this session which will help in organising annotating and citing research paper and also build their research network.

A session on Fire safety and Precautionary measures was conducted for all college staff.

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

Not Applicable

6.5.5

- a. Submission of Data for AISHE portal : (Yes)
- b. Participation in NIRF : (Yes)
- c. ISO Certification : (Yes)
- d. NBA or any other quality audit : (Yes)

6.5.6 Number of Quality Initiatives undertaken during the year

Year	Name of quality initiative by IQAC	Date of conducting activity	Duration (from--to-)	Number of participants
2018-19	Canada-India Acceleration Program (CIAP) for start-ups	21 st May 2018	April 2018 to August 2018	23
	Leaders in Action – Celebration of Inspiration, Knowledge and Giving	3 rd July 2018	-	102
	Facebook School of Innovation VR programme	15 th July 2018	15 th July 2018	All students
	ME BECOMES WE: Together to Build a Strong Nation	4 th August, 2018	-	205
	Diving into Deep Learning	1 st and 2 nd September, 2018	-	16
	Student Leadership Program by IDF	19 th September 2018	-	52
	E-Cell Orientation	26 th September 2018	2 Hours for each batch.	FE and Direct Second year (All Branches)
	SAKEC in	4 th October 2018	-	15-students and

collaboration with Roti Bank Mumbai promote "Daan Utsav"	to 12 th October 2018		11-faculties
Young innovator competition by Inno HEALTH	5 th and 6 th October 2018	3 months after last date of application i.e. 15th September 2018.	All students
Campus to Corporate (c2C)	8th, 9th and 10th October 2018	3 days	Placed students of Final Year (All Branches) - 106
Access to Employability	22 nd , 23 rd and 24 th October 2018	1- Day for each branch of engineering.	All Unplaced students of final year (All branches).- 300
Inauguration of Innovation Centre and Training	29 th January 2019	10AM to 5 PM	Staff and Students of all years and branches- 250
Celebration of Collaboration with Project Launch	2 nd February 2019	-	26-students and 3-faculties
Student Leadership Program at Anjuman Islam School & Felicitation Of Mentors	9 th February 2019	-	53-students and 1-faculty
Internship at Centre for Creative Learning, IIT Gandhinagar.	30 th May 2019 to 30 th July 2019	2 Months	All students of Engineering-3
Presentation Skills	13 th March 2019	11:00a.m	All students of Engineering-200
A Magazine Launch	13 th March 2019	1:00 p.m	200
MSME	13 th March 2019	2:00- 3:00 p.m	200
Cognitive Skills, Design Thinking	21 st December 2018	-	60

	And Critical Thinking			
	Intellectual Property Rights (Ipr) By Mr.Pinkesh Jain	21 st December2018	-	60
	India First Leadership Talk Episode 1 By Mr.Anand Mahindra	08 th January2019	-	152
2018-19	Live Workshop On Intellectual Property Rights (Ipr) By Ms.Shwetaree Majumnder	10 th January 2019	-	56
	India First Leadership Talk Episode 2 - By Dr.Anand Deshpande	24 th January2019	-	42
	India First Leadership Talk Episode 3 - By Shri Ajit Doval	19 th March 2019	-	34
	Idea Competition	30 th March 2019	-	60
	Design Competition For Proof Of Concept Development	03 rd April 2019	-	20
	India First Leadership Talk Episode 4 - By Prof. Anil D. Sahasrabudhe	22 nd April 2019	-	72
	Floor crossing	29 th August 2018	-	18
	Inter –Collegiate Quiz	06 th October 2018	-	23
	Elocution	10 th October 2018	-	14
	Alumni get together	02 nd February 2019	-	130
	Faculty Orientation	30 th January 2019	-	42

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-to)	Participants	
		Female	Male
Self Defence under IIC1.0	4/01/2019 to 7/01/2019	100	--
Jagrut Mumbaikar Citizen's awareness Program		--	--
Women's Self Defence and Crime Prevention	4 th January 2019	77	--
Catch Your 'I', be an Eye Catche	5 th January 2019		
“Wellness Talk on defence mechanism of our body”	7 th January 2019		
Sports Activity for Girls Students	18th February to 18th March 2019	107	--

CCTV facility: The institute has CCTV facility in classrooms, laboratories, library, and corridors at each floor for monitoring and security purposes. This facility is being used to monitor if students are obeying laws that were implemented in the college. The purpose of having CCTV cameras installed in college is to offer the college students and staff better security. The Female staff and students feel comfortable and safe. They gain the confidence to move out freely.

Female security guard: The institute is encouraging to appoint female security guards. One female security guard has been appointed on the main gate of the college. Her role is to check ID cards of both Staff and Students daily. She always gives her contribution to protect people and college premises for the safety purpose.

Girls Common Room: The institute has established a spacious and comfortable girl's common room. This space has been designed to give female students a place to relax, study, have informal discussions in free time available. Facilities like Recliner chairs, tables, yoga mate, and balls are available in this room.

7.1.2 Environmental Consciousness and Sustainability/Alternate Energy initiatives such as: Percentage of power requirement of the College met by the renewable energy sources

- Electric panel is located at the Ground floor.
- Regular maintenance of electric board is done time to time by our Electrician The board is changed with a new panel, new switches and capacitor bank.
- 3-Phase tripper is installed. Electric lightning was changed with LED Bulbs for less consumption of power and reduction in billing costs from 2017.

- Power factor is Unity from 2017.
- Energy saving is additionally ensured by students and staff by switching the lights and fans off whenever not in use. Students are doing some environment based projects which creates awareness among them.

Flow chart:

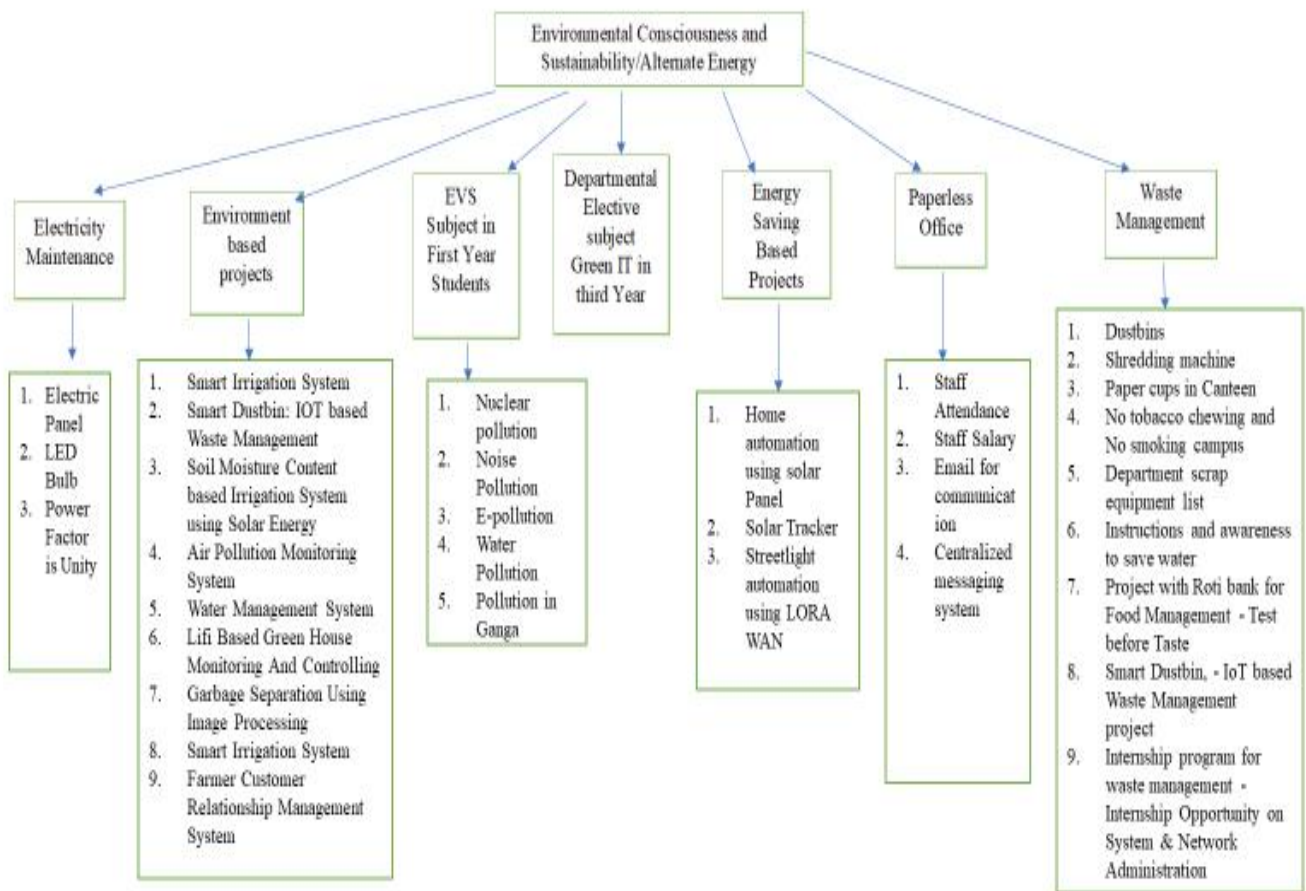


Figure 7.1.2 Flowchart of Environmental Consciousness and Sustainability/Alternate Energy initiatives

The details of such projects implemented by students are:

1) Title - Smart Irrigation System, (No. of Students - 4)

Summary: India is a country where agriculture is the main and vast field for our national financial system. Students have tried to implement the fruitfulness of technology to combine with agricultural field so that the growth of crops can increase exponentially. Irrigation is the methodology of

misleadingly supplying water to land where harvests are developed. Generally hand pumps, channel water and precipitation were a significant wellspring of water supply for watering system. This strategy has prompted serious disadvantages like under watering system, over-watering system which thus causes filtering and loss of supplement substance of soil. Changing ecological conditions and lack of water have prompted the requirement for a framework which effectively oversees watering system of fields. Computerized watering system framework is a machine based framework, which robotizes the watering system of area by joining different programming and equipment approaches together for field watering system.

2) Title -Smart Dustbin: IOT based Waste Management, (No. of Students - 4)

Summary: This project addresses the present day scenario where, garbage bins or Dustbin placed at public places in the cities are overflowing. This is due to increase in the everyday waste generated by the city. It creates unhygienic conditions for the people and creates a bad smell around the surroundings this leads in spreading some deadly diseases & human illness and ugliness to that place. This project has been implemented a smart alert system for garbage clearance by giving an alert signal to the municipal web server for instant cleaning of dustbin with proper verification based on level of garbage filling. The dustbin can be provided with a sensor which will help in tracking the level of the garbage bin so that it is easy to identify that the garbage bin is full. When the level of the bin reaches the threshold limit, the device will transmit the readings. These details can be accessed by the concerned authorities from their place with the help of Internet and an immediate action can be made to clean the dustbin.

3)Title - Soil Moisture Content based Irrigation System using Solar Energy(No. of Students - 4)

Summary: This project is based on solar based irrigation system. This system is checking soil moisture content based on that water is supplied to crops in the fields.

4)Title - Air Pollution Monitoring System (No. of Students - 4)

Summary: This project is implemented based on air pollution monitoring system. Students have implemented drone based system which monitors the air quality data, analyse it and send an alert to the concerned authority for necessary action. Integrated tools can be developed to improve for prediction of air pollution in mega cities.

5)Title - Water Management System (No. of Students - 4)

Summary: This project is based on water management system. Water scarcity affects more than 4 billion people in the world. One of the most critical challenges faced by the world is water shortage. The students have implemented a regulatory system that reduces the rate at which water is obtained at the outlets in a house after a specific volume. If this system is implemented in every household, the global scarcity of water can be effectively reduced. About 70% of the freshwater is used for irrigation, 22% for industrial purposes, and only 8% is used for domestic purposes. On an average, every person requires 20

to 50 litres of water a day to ensure their basic needs for drinking, cleaning and cooking. There is a need for a controlled distribution of water to every citizen of the country so that there is no water exploitation and wastage by a small wealthy portion of the population.

6) Title - Lifi Based Green House Monitoring and Controlling, (No. of Students - 4)

Summary: This Project is mainly proposed for Li-Fi based Greenhouse monitoring and controlling. India is a country where the economy is dependent on agricultural produce. Agricultural means can satisfy the food production demand. But due to isotropic climatic conditions, lack of water reservoir, agricultural produce does not meet the demands. At the present scenario, farmers have been using different irrigation techniques which require human intervention for increasing production. But due to this sometimes either the plants consume more water or the water reaches late up to the plants. This ultimately affects the plant growth. To overcome this problem, an automatic embedded system is developed which will record the temperature, moisture and other parameters that will control the environmental conditions in the plant field. Moreover, for effective communication, a Li-Fi technology is used along with embedded system.

7) Title: Garbage Separation Using Image Processing, (No. of Students - 4)

Summary: Recycling is the process of collecting waste materials and processing it into new products. Identification of recyclable waste is the first stage of recycling. The objective of this project is to design a robot (Recyclebot) that automatically segregates recyclable and non-recyclable waste and to create awareness among people about the benefits of recycling. The Recycle-bot system comprises of different modules for navigation, image acquisition, image processing and human-machine interface. It is mounted with two waste-bins on its either side to classify recyclable and non-recyclable materials and has a camera on the top. It uses image processing to analyse the object against its database and direct it towards the corresponding waste-bin using linear actuators. Solid waste management is a big challenge in urban areas for most of the countries throughout the world. An efficient waste management is a prerequisite for maintaining a safe and green environment as there are increasing all kinds of waste disposal. Many technologies are used for waste collection as well as for well managed recycling. The Information gathering is cumbersome.

8) Title: Smart Irrigation System, (No. of Students - 4)

Summary: The purpose of this project is to provide embedded based system for soil monitoring and irrigation which not only reduces the manual monitoring of the field but also helps to save water. The soil is tested using various sensors such as soil moisture sensor, temperature sensor, humidity sensor and gas sensor. Measured sensor values are passed to cloud via NodeMCU, which is an open source IoT platform. Based on the comparison with predefined values, appropriate crops suitable for the soil is determined and informed to the farmer via android mobile application.

9) Title: Farmer Customer Relationship Management System, (No. of Students - 4)

Summary: The proposed application aims to create a direct relationship between the customers and the farmers. Here customers can purchase farm products directly from the farmers via the application. There is a dealer who help farmers by providing them the resources i.e. farming equipment's, fertilizers, pesticides etc. they require for carrying out their agricultural activities directly at cheaper rates. This application removes the concept of middleman also known as wholesalers, distributors or retailers and allowing the farmers to earn more profit from their sales.

Environmental Awareness Created by EVS Subject in First Year Students

Aim of EVS (environmental studies) is to develop a population that is aware and concerned about the environment and its associated problems. The population which has skills, knowledge, attributes, motivation and commitment to work as an individual or team towards solution of current problems. As future technologists students can think and work for sustainable development.

Objective of E.V.S are:

- **Awareness:** To help the student as an individual or a group acquire awareness and sensitivity to the total environment and its problems.
- **Knowledge:** To help students to gain a variety of experiences and acquire a basic understanding of the environment and its associated problems.
- **Attitude:** To help students to acquire a set of values and feelings of concern for the environment.
- **Skills:** To help students in acquiring skills to identify and solve environmental problems.
- **Participation:** To motivate students and provide an opportunity to be actively involved at all levels in working toward resolution of environmental problems.

Above stated objectives can be attained to greater extent by including effective methods of dissemination of information to the younger generation. Involving case studies, group discussions, seminars are the fewer methodologies which have been implemented. The change in attitude and behaviour of students was examined at the end of the course.

Environmental Awareness created by Green IT subjects of third Year :

Green IT is an elective subject of IT dept opted by students in academic year 2018-19.

There are 50 students who opted for this elective. The key features explain the harm caused by IT to the environment and the problems faced due to e-waste. The subject gives various ways to reuse, recycle, and refurbish e-waste. It talks about sustainability and various other metrics which can be used by green IT. Students can use digital library to analyse real life problems and their solutions using Green IT.

Energy Saving Based Projects: Students are doing some energy saving based projects. The details of such projects implemented by students are:1) Title - Home automation using solar Panel, (No. of

students - 4)

Summary: The Room Automation is a wireless room automation system that is supposed to be implemented in existing room environments, without any changes in the infrastructure. Room Automation let the user to control the room from his or her computer and assign actions that should happen depending on time or other sensor readings such as light, temperature or sound from any device in the Room Automation network using a solar panel which saves electricity.

2)Title- Solar Tracker, (No. of students - 3)

Summary: Sun based vitality is quick turning into a significant method for sustainable power source asset. With sun powered following, it can end up conceivable to create more vitality since the sun panel can keep up an opposite profile to the beams of the sun. Despite the fact that the underlying expense of setting up the following framework is significantly high, there are less expensive alternatives that have been proposed after some time. This venture disks the structure and development of a model for sun based following framework that has a solitary hub of opportunity. Light Dependent Resistors (LDRs) are utilized for daylight identification. The control circuit depends on an ATmega328P microcontroller. It was customized to distinguish daylight by means of the LDRs before impelling the servo to position the solar panel. The solar panel is situated where it can get most extreme light. When contrasted with different engines, the servo engines can keep up their torque at fast. They are likewise progressively proficient with efficiencies in the scope of 80-90%. Servos can supply generally twice their evaluated torque for brief periods. They are likewise peaceful and don't vibrate or endure reverberation issues. Execution and qualities of solar panel boards are breaking down tentatively. One of the approaches to expand the productivity of solar panel while lessening costs.

Influencing it to have expanded power yield. The trackers can either be double or single pivot trackers. Double trackers are progressively productive in light of the fact that they track daylight from the two tomahawks.

3)Title: Streetlight automation using LORA WAN, (No. of students - 4)

Summary: Increase in population and the corresponding increase of roads has increased the number of street lights, for the roads and people's safety, which raises investment and energy. Lighting consumes an adequate amount of energy in both outdoor and indoor. However different approaches are being proposed for making systems energy efficient and upgraded with latest technology. This research gives precise and the best control over energy efficient street lighting system. It gives practical implementation using Long Range (LoRa).

Paperless Office:

1. Staff Attendance (Teaching and Non-teaching) : Using biometric attendance(ERP) system.
2. Staff Salary (Teaching and Non-teaching): Salary slips are sent to official mail-id from account

department.

3. All the staff members are using email for communication. Also college encourages staff and students to use online storage media for maintaining and sharing the information.
4. College has facility of centralized messaging system. Through which a message can be sent to staff, students and parents.

Waste Management:

1. College believes in inculcating cleanliness and environmental consciousness values among students. Thus dustbins are kept at all the major places in college campus.
2. Major waste produced on campus is in the form of papers, college has a shredding machine which takes care of it.
3. College canteen also makes an effort to reduce the use of plastic thus mostly steel utensils and paper cups are used for serving food and tea.
4. Further the college campus is declared as no tobacco chewing and no smoking campus.
5. **e-waste Management:** If any instrument and computer are not in working condition, then it is checked for repairing. If it is not repairable then each department prepare the scrap equipment list after the approval from technician. Technician checks if some parts are useful in other systems then they are kept aside for future use.

The institute has conducted internship program for e-waste management. The details of the program are as below:

Name of Event - Internship Opportunity on System & Network Administration

Date of Event - 20/12/2018 to 29/12/2018

Description - This internship program aimed at giving hands on training to the students. Students were given an opportunity to learn system administration and work on live project. Hands on training were given on LAN administration, Firewall design in Linux, OS installation: Windows and Linux, PC hardware and assembly to students by different SAKEC staffs. At the last day of internship, students have formatted all faulty PCs and installed operating system and different applications with drivers. Also, students have identified scrap and useful components. On successful completion, the participants were awarded with an Internship certificate. Six students are shortlisted for the industry internships starting from 31st December 2018.

6. Instructions and awareness are created among students and staff for the proper use of water. Maintenance of taps in various washrooms is done to avoid wastage of water. Waste generated from college canteen is separated.

7. Students are doing projects with Roti bank for Food Management. Students have developed the product Test before Taste for the Roti bank. This product tests the extra food received from the different Parties, events and local community.

The institute is motivating the students to do project based on waste management. Student have implemented Smart Dustbin, which is IoT based Waste Management project.

7.1.3 Differently abled (Divyangjan) friendliness

Items Facilities	Yes/No	No. of Beneficiaries
Physical facilities	YES	NA
Provision for lift	YES	NA
Ramp/ Rails	Yes (Ramps are provided on ground floor and railing are provided in auditorium while approaching the stage)	NA
Braille Software/facilities	NO	NA
Rest Rooms	YES	NA
Scribes for examination	YES	01
Special skill development for differently abled students	NO	NA
Any other similar facility	YES (Washrooms and wheel chair)	NA
No students are enrolled under the above mentioned category. In case a student or staffs is temporarily disabled he/she can avail the above mentioned facilities		

7.1.4 Inclusion and Situatedness

Year	Number of initiatives to address locational advantages and disadvantages	Date and duration of the initiative	Name of the initiative	Issues addressed	Number of participating students and staff
2018 - 2019	6	14 th & 15 th , July 2018	IETE International Conference – ICRTST-2K18 on	An international conference on 'Recent Trends in Sustainable Technologies (ICRTST-2K18) was held during 14-15 July, 2018.	Students - 10 Staff – 10

			Recent Trends In Sustainable Technologies	The event was organized by IETE Mumbai Centre at SAKEC because of centralized and convenient locational advantage of college.	
		7/6/2018 to 16/8/2018	Maharashtra State Common Entrance Test Cell Facilitation Center for Admission to First Year of Four Year Full Time Degree Courses in Engineering and Technology	To provide IT facilities for local public for Online (a) Application Registration. (b) Creation of Username and Password (c) Filling up Application Form for MHT-CET (d) Scanning of documents and uploading (e) Uploading of recent Photograph and Signature (f) Documents verification and confirmation	Students - 418 Staff – 18
		2/5/2019 and 3/5/2019	MH CET online Examination Centre	To provide IT infrastructure for conduction of MH CET online Examination	Students - 434 Staff – 18
		21 April 2018	MH CET Webinar	MH CET Webinar session was held in our college at 7th floor auditorium. Students and their parents had attended this live telecast session	Students - 30 Staff - 10
		-	Proximity to	College is close to	Students –

			Govandi Railway Station. (approximately 1km distance)	Govandi Railway Station on Harbour Railway Line. Majority of students and staff use public transport to attend college.	2271 Staff – (approximately 115)
		-	Proximity to Shatabdi Hospital. (approximately 100 meters)	Pandit Madan Mohan Malviya Shatabdi Municipal General Hospital in Govandi East, Mumbai is a top player in the category Public Hospitals in the Mumbai. This well-known establishment acts as a one-stop destination servicing customers both local and from other parts of Mumbai. Our college students get advantage of this hospital	Students - 01 Staff - Nil
			Proximity to Deonar Bus Depot of BEST (approximately 500 meters)	Deonar Bus Depot of BEST undertaking is the major bus depot. Students get buses for all parts of Mumbai from this depot. Staff and students use city bus to travel to college.	Approximately 1/3 of total 206 staff members of college.
Year	Number of initiatives taken to engage with	Date and duration of the initiative	Name of the initiative	Issues addressed	Number of participating students

	and contribute to local community				and staff
2018 - 19	9	5/10/2018	Blood Donation Camp On the account of 150 th Birth Anniversary of Mahtma Gandhi	The Student Council 2018-19 in association IEEE-SAKEC. On the account of 150 th Birth Anniversary of Mahatma Gandhi has organized a Blood Donation Drive in association with the Anviksha Blood Bank in the college premises.	Students - 142 Staff - 19
		20/8/2018 & 21/8/2018	Help Kerala Campaign	IEEE SAKEC conducted a 1-day event wherein the students and staffs of the college have participated to support Kerala people. The cause for the rehabilitation of the people affected by the herculean floods in Kerala. The community contributed to the cause by donating food as well as clothes to the affected people. All the donated items were then collected and then sent to Kerala where they were distributed among the people in need.	Students – 10 Staff – 13

			26/10/2018	Dan Utsav at Sulabha Special School	The event was a great success with the whole hearted efforts of college staff and student volunteers who donated food items like Daal, rice and bournvita packets to the underprivileged school children.	Students - 15 Staff - 11
			4/2/2019 to 9/2/2019	Student Leadership Program at Anjuman Islam School & Felicitation of Mentors	SAKEC-mentors were at the school for mentoring 480 school students in terms of taught topics like Time Management, Anger Management, Public Speaking, Good company & Bad company, Career guidance, Community Hygiene etc. The students were encouraged to take initiative and be a responsible citizen of India, leaders of India by interactive sessions conducted by the mentors and also students were quite supportive as well. Mentors got a new exposure to teach and learn from the young students at Anjuman-I-Islam Girls School.	Students – 53 Staff - 01

		3/10/2018	Workshop on Encouraging students towards STEM	Govandi Education Society's R.S.T Madhyamik Vidyalaya invited the students of IEEE SAKEC in Govandi to conduct a session on Encouraging students towards "STEM" so as to impart knowledge about various courses to pursue in STEM .	Staff - Nil Students - 7
		4/8/2018	ME BECOMES WE: Together to Build a Strong Nation-	The event " ME BECOMES WE: Together to Build a Strong Nation " to celebrate the collaboration of SAKEC with Indian Development Foundation (IDF) & Roti Bank Mumbai was organised on 4th August 2018. It was graced by Dr. Narayan B. Iyer, CEO & National Co-ordinator Mumbai) (Indian Development Foundation), Shri D Sivanandan IPS (Retd.) Former Director General of Police (Mentor and Founder of (Roti Bank Mumbai), Mr. Shashank Shetty Hon. Director (Indian Development	Students – 192 Staff - 32

				Foundation) Education Projects & Project Lead (Larsen & Toubro Infotech), Ms. Shriya Kumar Strategy Advisor (Roti Bank Mumbai) & Derivatives Sales and Structuring (JP Morgan Chase), Mr. Amit Sarkar Project Manager –Social Responsibility (Indian Development Foundation), Mr. Bhavesh Adhia.	
		25/10/2018	ISR-Joy of Giving 2018	<p>As a part of Institute’s Social Responsibility, Computer Engineering Department of SAKEC, along with few faculties and students has visited Zilla Parishad School in small village of the Raigad district and spent their day with the school students.</p> <p>The joy, we witnessed on their little faces as they welcomed us with smiles was wonderful.</p> <p>Excitement ensued when the goodies were distributed to these kids.</p> <p>Enthusiasm among our</p>	Students – 9 Staff - 8

volunteers as they interacted with the students of the school was also palpable. There was a marked happiness among all the staff and the feeling of joy was apparent all around. It was indeed a humbling and memorable experience to hear these kids out and spend time with them.

7.1.5 Human Values and Professional Ethics

Code of conduct (handbooks) for various stakeholders

Title	Date of Publication	Follow up (maximum 100 words each)
Students	January, 1987	All students from engineering follow rules of indulging in anti-national activities, punctual about attendance, closing of main gate after specific time, must carry I-card and smart card daily, read the notice instruction on the notice board, smoking and consumption of alcohol is strictly prohibited. Political activities, teasing harassing fellow students is strictly prohibited. Ragging is banned; dress code needs to be strictly followed. Electronic devices like cell phones are prohibited in college. Damaging Institutes property including books, furniture is prohibited.
Staff to use Library	January, 1987	Books issued should be given back in good condition in a predefined time. Personal transaction of issue and returning of book. In case of lost, a brand-new copy of latest edition of same author to be given to library. Handbooks, Encyclopaedias, CD's cannot be issued. Use of mobile phones not allowed. Bags to be kept in stack properly.
Student to use Library	January, 1987	Students can borrow 2 books at a time weekly. Students must return the books to the library promptly. If failed, will result in a fine of Rs.2.per transaction to be done personally with signing of I-card. Reference books, CD's, syllabus, question papers and periodicals should be borrowed against the identity card and to be used in library. Photocopies can be taken only with permission. Smart Card should not be interchangeable. Keep Silence. Mobile phone usage, Eating,

		Littering is not allowed in the library. If lost, replacing it with a brand-new copy of the latest edition of the same book.
IT Policy	-	For utilization of internet through wired or Wi-Fi network by staff and student's IT policy was made by the institute. Privilege granted is rigorously monitored. Updated with IT act 2000 which prohibited hacking, cracking, spooning. Authorization is necessary before using collect connectivity staff and students are provided with <u>xyz@sakec.ac.in</u> email id. College strictly prohibited unauthorized entry in file, user identification, illegal use, threats, Reselling, Impersonation, use of technology to produce. Any third part personal antivirus or firewall is not allowed. Hacking tools, Gambling, Copyright Violation, Accessing and downloading movies, Malicious actions is strictly prohibited.
Appointment Letter	Date on which staff joins	Every staff (Adhoc and UGC) on joining gets an appointment letter which mentioned general rules and regulations to be followed during service time. It includes period of probation, basic pay (for regular staff), increment, total salary drawn per month (for Adhoc) office timing, eligibility of leaves. Smoking, chewing nuts, alcohol consumption, Non-veg food is prohibited. 1 month notice during prohibition, 3 month notice for regular staff in case of resignation. Carry out department work, examination work as and when required. Taking care of intellectual property, and maintaining good relationship with institute.

7.1.6 Activities conducted for promotion of universal Values and Ethics

Activity	Duration (from---to--)	Number of participants
Blood Donation Camp On the account of 150th Birth Anniversary of Mahtma Gandhi	5/10/2018	161
Dan Utsav at Sulabha Special School, Tilaknagar	26/10/2018	26
Maranatha harvest mission orphanage society , Chembur	3/2/2019	10
Session on Kerala Flood: Untold	10/9/2018	185
Project on Test before Taste	2/2/2019	05
Stress Free exams	13/3/2019	200
SAKEC TALKS: A Motivational Session	1/8/2018	30
Vachan Prerna divas	15/10/2018	09
Beach Clean up	26/1/2019	37

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

1. Plastic free campus: Colleges strongly says no to plastic. Thus, dustbins are kept all major places in college. College canteen consciously takes effort to reduce the use of plastic while serving food. Further an effort towards plastic free campus, college gives saplings as gifts or prizes to students and to reduce the use of plastic water bottles college have make provision of filter water dispensers on every floor.

2. Green garden: College maintains a green landscape garden to inculcate environment awareness among students.

3. Paperless communications: Paperless communications are practiced within and outside department by sending mails and messages. Google classroom is used for taking quiz, sharing notes and ppts with students. Google drive is mainly used for departmental work.

4. Public Transport: Since college is located in the heart of the city, all the major public transport like train and busses are easily available. Most of the faculties and students prefer to travel using public transport.

5. E-waste management: If any instrument and computer are not in working condition then it is checked for repairing. If it is not repairable then each department prepare the scrap equipment after the approval from technician. Technician checks if some parts are useful in other systems then they are kept aside for future use.

6. Smoking Free Campus: No smoking posters are displayed in corridor of each floor. Also institute has smoke detectors at each floor.

7. Instructions and awareness is created among students and staff for the proper use of water. Maintenance of taps in various washrooms is done to avoid wastage of water.

8. Waste generated from college canteen is separated.

7.2 Best Practices

Best Practices I:

1. Title of the Practice: Corporate Social Responsibility (CSR) activities in the college.

2. Goal:

1. To enable students and staff to communicate with local society through various events.
2. To understand the growth and development of marginalized communities.
3. To shape responsible and supportable professionals for the community.

3. The Context

Along with the adaptation of good teaching learning process, college is organizing various social activities to enhance the social responsibilities among students and staff. Students are motivated to

contribute to various local communities. College realizes that community service is one of the essential elements of true education. The objective of the Institute is to develop student's professional with social work values and ethics.

4. The Practice

Institute has organized following events:

a) Blood Donation Camp:

The Student Council 2018-19 in association IEEE-SAKEC, on the account of 150th Birth Anniversary of Mahtma Gandhi has organized a Blood Donation Drive in association with the Anviksha Blood Bank in the college premises. Total 142 students and 19 staff have participated in this camp.

b) Help Kerala Campaign:

IEEE-SAKEC conducted a 1-day event wherein the students and staff of the institute helped Kerala people. The cause for the rehabilitation of the people affected by the herculean floods in Kerala. The community contributed to the cause by donating food as well as clothes to the affected people all the donated items were then collected and then sent to Kerala where they were distributed among the people in need.

c) Dan Utsav:

In this event staff and students of the institute has donated food items like Daal, rice and bournvita packets to the underprivileged school children at Sulabha Special School.

d) Student Leadership Program at Anjuman Islam School:

Students and staffs of the institute has mentored 480 school students in various topics like Time Management, Anger Management, Public Speaking, Good company & Bad company, Career guidance, Community Hygiene etc. The students were encouraged to take initiative and be a responsible citizen of India, leaders of India by interactive sessions.

e) ISR - Joy of Giving 2018:

As a part of Institute's Social Responsibility, faculties and students have visited Zilla Parishad School in small village of the Raigad district and spent their day with the school students.

5. Evidence of Success

The evidence of success of CSR activities is reflected through the overall development of the students towards local community and as a responsible citizen. Students and staffs are involved in various real life projects in collaboration with different NGOs.

6. Problems Encountered and Resources Required

To mould the student's mentality towards improvement in their personality without hampering academics was a difficult task.

Best Practices II:

1. Title of the Practice: MOUs with different NGOs.

2. Goal:

1. To provide Social, Educational and Economic Empowerment to society.
2. To facilitate and support skill development initiative in the society and corporate.
3. To conduct study on various social issues time to time, gather data, and carry out research.

3. The Context

Institute has signed MOUs with some NGOs. Students and faculties are working on different projects with NGOs.

4. The Practice

Institute has collaboration with NGOs like Indian development foundation (IDF), Roti Bank Mumbai, Bombay Leprosy Project, Art of Living International Association for human values (IAHV), Live Your Dream Foundation (Happy Bubbles), Waggy Tails Private Limited. Students are involved in various real life projects in collaboration with above mentioned NGOs.

5. Evidence of Success :

Along with faculty mentors students have identified the problem statements and completed the project successfully.

Refer Website-Link: http://shahandanchor.com/research/index.php/Ctrl_mous

7.3 Institutional Distinctiveness

Innovation & Entrepreneurship

Innovation and entrepreneurship approach are highly needed in today's engineering world. Apart from its vision, institution has established its distinctive approach towards innovation and entrepreneurship. Institute believes in keeping an innovative approach towards living which is currently needed in every aspect of society and also at workplace. In today's scenario there is a constant demand for engineers with an innovative and entrepreneurial mindset. Following initiatives are taken by the institute to promote innovative and entrepreneurial mindset among students.

1. **E-cell (entrepreneurship cell):** E-cell is established to promote strong entrepreneurial culture among students and ecosystem for venture creation and early start-ups. Ecell organises various events, workshops, talks, competitions to introduce and improve innovative thinking among students .E-cell, further provides internships to students. Institute have also achieved 31st internship rank among 1800+ colleges as per the internship survey conducted by Internshala. Following are the list of activities conducted under E-cell in academic year 2018-19:

- Stress free exams
- Facebook School of Innovation VR programme.
- Presentation Skills
- Young innovator competition by InnoHEALTH
- Campus to Corporate (C2C)
- Access to Employability
- MSME for start-ups.

Internship opportunities at E-cell:

- Internship at Centre for Creative Learning, IIT Gandhinagar.

Link: <https://www.shahandanchor.com/home/entrepreneurship-cell-e-cell/>

2. **Innovation Center and Training:** Institute has an innovation center, a place where students can come and sharpen their innovative ideas. Innovation center maintains software purchased from InnovationNext which is used by the students. InnovationNext has conducted a motivational training session in the college focusing on this software.

3. **Smart India Hackathon, Avishkar and Big idea summit:** From global corporates to local governments everybody today is searching for sustainable solutions that can combat pressing environmental and social problems. National and state level initiatives like smart India Hackathon and Avishkar provides students with a platform wherein they can provide solution to such problems thus

inculcating a culture of innovation, research and problem solving among them .Initiatives like big idea summit helps students to develop their innovative ideas and also support them with their start-ups. Institute constantly encourages students to participate in such competitions.

- From the college two teams were selected for smart India Hackathon, under Software Edition, SAKEC Team “Phoenix Force” won First prize of 50,000 Rupees at Mumbai Nodal Centre in simple complexity category in Third Edition of SIH.

- From the institute four groups participated in Avishkar 2019 and one group with project title “3 axis CNC machine” was selected for next level.

Link: https://www.shahandanchor.com/etrx/?page_id=1568

- A team of Electronics & Telecommunication Engineering Department, who showcased the Set up SMART MIRROR, were selected for the BIG IDEA SUMMIT 2018 EXPO.

Link: https://www.shahandanchor.com/etrx/?page_id=1568

4. **Institute Innovation Council (IIC):** College has established an Institution Innovation Council (IIC) approved by the Ministry of HRD, Govt. of India. The vision of IIC-SAKEC is to systematically foster the culture of Innovation in Institution. Following events were conducted under IIC in academic year 2018-19.

- Workshop on cognitive skills, design thinking, and critical thinking.
- Awareness session on Intellectual Property Rights (IPR).
- India First Leadership Talk -Webinar by MHRD’s Innovation cell.
- Workshop on IPR for students and faculty members.
- India First Leadership Talk episode 2,3 and 4 -Webinar by MHRD’s Innovation cell.
- Idea Competition
- Design competition for Proof of Concept development.

Link: <http://shahandanchor.com/iic/>

8. Future Plans of action for next academic year (500 words)

- Encouraging the faculty and students for registering their IP by Establishment of IPR Cell.
- Motivating and encouraging the staff to adopt new teaching learning methods.
- Encouraging staff members to pursue PhD
- Increasing number of MoUs
- Motivating students to pursue internships and working on more funded projects.
- Conducting more number of CSR activities.
- Encouraging students and staff for developing their writing skills.
- Encouraging students for more entrepreneurship activities.

Dr. Nilakshi Jain
Coordinator, IQAC

Dr. Bhavesh Patel
Chairperson, IQAC

Annexure I

Abbreviations:

CAS	-	Career Advancement Scheme
CAT	-	Common Admission Test
CBCS	-	Choice Based Credit System
CE	-	Centre for Excellence
COP	-	Career Oriented Programme
CPE	-	College with Potential for Excellence
DPE	-	Department with Potential for Excellence
GATE	-	Graduate Aptitude Test
NET	-	National Eligibility Test
PEI	-	Physical Education Institution
SAP	-	Special Assistance Programme
SF	-	Self Financing
SLET	-	State Level Eligibility Test
TEI	-	Teacher Education Institution
