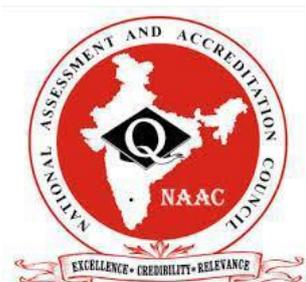


Annual Quality Assurance Report (AQAR)- 2017-18

Submitted to

NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL (NAAC)

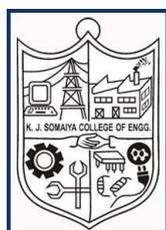


An Autonomous Institution of the University Grants Commission

P.O. Box No.1075, Agarbhavi

BANGALORE-560072

by



K. J. Somaiya College of Engineering

(Autonomous College Affiliated to University of Mumbai)

Vidyavihar, Mumbai-400077, Maharashtra.

Email: principal.engg@somaiya.edu,

Website: www.somaiya.edu/vidyavihar/kjsce/

Phone: + 912266449191

Fax: +912221025272

Part – A

I. Details of the Institution

1.1 Name of the Institution

K J Somaiya College of Engineering

1.2 Address Line 1

Vidyanagar

Address Line 2

Vidyavihar(E)

City/Town

Mumbai

State

Maharashtra

Pin Code

400 077

Institution e-mail address

principal.engg@somaiya.edu

Contact Nos.

91-22-66449191

Name of the Head of the Institution:

Dr. Shubha Pandit

Tel. No. with STD Code:

91-22-66449001

Mobile:

9820514966

Name of the IQAC Co-ordinator:

Dr. Sonali Patil

Mobile:

9167720001

IQAC e-mail address:

iqac.engg@somaiya.edu

1.3 NAAC Track ID (For ex. MHCOGN 18879)

MHCOGN26880

1.4 NAAC Executive Committee No. & Date:

(For Example EC/32/A&A/143 dated 3-5-2004.
This EC no. is available in the right corner- bottom
of your institution's Accreditation Certificate)

EC(SC)/24/A&A/62.1 dated May-02-2017

1.5 Website address:

<https://kjsce.somaiya.edu/kjsce/>

Web-link of the AQAR:

<https://kjsce.somaiya.edu/kjsce/academics/iqac/AQAR>

1.6 Accreditation Details

Sl. No.	Cycle	Grade	CGPA	Year of Accreditation	Validity Period
1	1 st Cycle	1 st Cycle	A	3.03	2017
2	2 nd Cycle	2 nd Cycle	NA	NA	NA
3	3 rd Cycle	3 rd Cycle	NA	NA	NA
4	4 th Cycle	4 th Cycle	NA	NA	NA

1.7 Date of Establishment of IQAC :

DD/MM/YYYY

16/05/2016

1.8 AQAR for the year (for example 2010-11)

2017-18

1.9 Details of the previous year's AQAR submitted to NAAC after the latest Assessment and Accreditation by NAAC : **Not Applicable**

1.10 Institutional Status

University

State Central Deemed Private

Affiliated College

Yes No

Constituent College Yes No

Autonomous college of UGC Yes No

Regulatory Agency approved Institution Yes No

(eg. AICTE, BCI, MCI, PCI, NCI)

Type of Institution Co-education Men Women

Urban Rural Tribal

Financial Status Grant-in-aid UGC 2(f) UGC 12B

Grant-in-aid + Self Financing Totally Self-financing

1.11 Type of Faculty/Programme

Arts Science Commerce Law PEI (Phys Edu)

TEI (Edu) Engineering Health Science Management

Others (Specify)

1.12 Name of the Affiliating University (*for the Colleges*)

University of Mumbai

1.13 Special status conferred by Central/ State Government-- UGC/CSIR/DST/DBT/ICMR etc

Autonomy by State/Central Govt. / University

University with Potential for Excellence

UGC-CPE

DST Star Scheme

UGC-CE

UGC-Special Assistance Programme

DST-FIST

UGC-Innovative PG programmes

Any other (*Specify*)

UGC-COP Programmes

2. IQAC Composition and Activities

2.1 No. of Teachers

2.2 No. of Administrative/Technical staff

2.3 No. of students

2.4 No. of Management representatives

2.5 No. of Alumni

2.6 No. of any other stakeholder and
community representatives

2.7 No. of Employers/ Industrialists

2.8 No. of other External Experts

2.9 Total No. of members

2.10 No. of IQAC meetings held : 06

2.11 No. of meetings with various stakeholders:

No.

Faculty

Non-Teaching Staff + Students

Alumni

Others

2.12 Has IQAC received any funding from UGC during the year?

Yes

No

If yes, mention the amount

2.13 Seminars and Conferences (only quality related)

(i) No. of Seminars/Conferences/ Workshops/Symposia organized by the IQAC

Total Nos. International National State Institution Level

(ii) Themes

Sensatization program for Persons with Disabilities, Leadership development, Orientation Programs for new students & faculty

2.14 Significant Activities and contributions made by IQAC

1. Formation of Internal Research Review Committee for ensuring the quality of UG and PG projects
2. Conduction of Academic Audit
3. A week long First Year (FY) Orientation
4. Leadership development programme for office Bearers (Two phases): 28 Participants
5. Orientation to newly joined faculty members: 18 Participants
6. Workshop on Inclusive Education for faculty & persons with disability (PWD) students
7. Fire Safety Trainings

College also got following recognitions:

- KJSCE is ranked by National Institutional Ranking Framework (NIRF 2018) MHRD, Government of India in the 150-200 band
- KJSCE has been listed 17th rank amongst top 150 engineering institutes in India and ranked 8th in top 100 private engineering institutes rankings for the year 2018 in "Times of India Engineering Institute Ranking" Survey 2018.
- India Today Ranking 2018 May 2018
 - i. Rank 9 in Top 10 private engineering colleges offering best average annual salary
 - ii. Rank 3 in West Zone in Top 5 engineering colleges
 - iii. Rank 15 in Top 165 engineering colleges in India

2.15 Plan of Action by IQAC/Outcome

The plan of action chalked out by the IQAC in the beginning of the year towards quality enhancement and the outcome achieved by the end of the year *

Plan of Action	Achievements
Conduction of orientation programs	1. A week long FY Orientation was conducted which gave the newly admitted students the gist of all the facilities, both academic & infrastructural, which they can make a use of in the course of their 4years stay in the college. This also included sessions on mentoring & universal human values,

	<p>safety, constitution of India, carrier guidance, alumni panel discussion for orienting the students for branch specific opportunities, etc. The students appreciated the program as it gave them whole picture of their UG at a glance</p> <p>2. 2-Day Orientation Program for Newly Joined Faculty Members was conducted to orient them about various systems, policies, procedures followed in the college. They were made aware about the responsibilities of faculty member in an autonomous college.</p>
Evaluation of Academic processes	Conducted academic audit on 9 th March 2018 The report of the audit was shared to the departments to take the further action for improvement.
Administration audit Examination System Audit	Planned but could not be scheduled in academic year 2017-18
Monitoring the quality of projects & research work	Internal Research Review Committee (IRRC) comprised of 14 senior faculty members was formed. IRRC is taking steps towards making the project evaluation uniform across the departments.
Improving the administrative & leadership qualities of the office bearers	A leadership development program (two out of three phases done in 2017-18) was organized in association with an external agency named i-transform. The facilitators explained the importance of strategic planning & benchmarking to achieve excellence in engineering education. The office bearer performed their SWOT analysis with respect to the position held. Then making of personal development plans was taken up. The discussions were initiated in the groups to identify the USP for KJSCE and identifying the efforts that needs to be taken towards the same.

** Attach the Academic Calendar of the year as Annexure.*

2.15 Whether the AQAR was placed in statutory body Yes No

Management Syndicate Any other body

Provide the details of the action taken

NIL

Part – B

Criterion – I

I. Curricular Aspects

1.1 Details about Academic Programmes

Level of the Programme	Number of existing Programmes	Number of programmes added during the year	Number of self-financing programmes	Number of value added / Career Oriented programmes
PhD	02	01(Applied)		
PG	06	NIL		
UG	05	NIL		
PG Diploma	NIL			
Advanced Diploma				
Diploma				
Certificate				
Others				
Total	13	01		
Interdisciplinary	01			
Innovative				

1.2 (i) Flexibility of the Curriculum: Core/Elective option

(ii) Pattern of programmes:

Pattern	Number of programmes
Semester	11
Trimester	
Annual	PhD 02

1.3 Feedback from stakeholders* (On all aspects)

Alumni Parents Employers Students

Mode of feedback : Online Manual Co-operating schools (for PEI)

**Refer AnnexureII*

1.4 Whether there is any revision/update of regulation or syllabi, if yes, mention their salient aspects.

KJSCE is an autonomous institute affiliated to University of Mumbai. Academic Autonomy conferred by the University of Mumbai from the Academic Year 2014-15, gave us the freedom to develop and implement our own curriculum KJSCE2014 with features such as inclusion of choice based Interdisciplinary Course (IDC), Audit Courses, Add on Credit Courses, Exposure Courses, etc. Distinct assessment and evaluation methods were also designed based on the focus of individual course. And the outcome of this entire exercises; either by way of student placements or the feedback received from all stakeholders is quite encouraging.

The syllabus is under revision that will be effective from July 2018 for F. Y. B. tech.

Salient features of proposed curriculum:

- Focus on experiential learning
- 170 credits as against 190 credits in present curriculum
- Increase in flexibility by introducing more number of electives (open and departmental)
- Addition of Add-on Credit Courses(AOCC) and Add-on Audit Courses (AOAC)
- In FY 2018 curriculum, the total number credits, lectures per week, number of end semester theory exam papers are reduced. Induction program and exposure courses are introduced. Applied chemistry-I and Applied chemistry-I I courses are combined into a single course named Engineering chemistry. Similarly, Applied physics-I and Applied Physics-II courses are combined as Engineering Physics course.
- Focus on Fulfilment of program outcomes through curriculum by introducing multiple activities in internal assessment.
- Focus on hands-on learning by introducing laboratory courses, mini project
- Increase in weightage of continuous assessment
- Use of various ICT tools for teaching, learning and evaluation.
- Focus on Industrial trends and employability of students
- Motivation for self-learning
- Motivation for fast learners in the form of AOCC and AOAC courses

1.5 Any new Department/Centre introduced during the year. If yes, give details.

Application for approval of PhD Research Centre for Computer Engineering was made to University of Mumbai. There was a subsequent visit of LIC(University of Mumbai) for inspecting the availability of various resources (Library, Infrastructure, laboratory, etc). Approval for same is awaited.

Criterion – II

2. Teaching, Learning and Evaluation

2.1 Total No. of permanent faculty

Total	Asst. Professors	Associate Professors	Professors	Others
160	143	05+02	10	-

2.2 No. of permanent faculty with Ph.D.

21 + 6 (S & H)

2.3 No. of Faculty Positions Recruited (R) and Vacant (V) during the year

Asst. Professors		Associate Professors		Professors		Others		Total	
R	V	R	V	R	V	R	V	R	V
10	0	07	45	10	17	-	-	27	62

2.4 No. of Guest and Visiting faculty and Temporary faculty

--	01	15
----	----	----

2.5 Faculty participation in conferences and symposia:

No. of Faculty	International level	National level	State level
Attended	21	37	4
Presented papers	85	1	NIL
Resource Persons	20	36	4

2.6 Innovative processes adopted by the institution in Teaching and Learning:

1. Use of different tools for Internal Assessment components (MCQs, Puzzles, Mini Projects, screencasts, etc.)
2. Onscreen end semester exams for courses like Engineering Drawing (ED)/Fundamentals of C-programming (FCP)
3. Variety of Audit courses (ACs) and exposure course
4. Empirical way adopted for delivery of 'Elements of Electrical and Electronics Engineering' (EEEE) FY course.

2.7 Total No. of actual teaching days

during this academic year

140 (excluding examination period)

2.8 Examination/ Evaluation Reforms initiated by the Institution (for example: Open Book Examination, Bar Coding, Double Valuation, Photocopy, Online Multiple Choice Questions)

1. Final results are declared with all gracing rules applied before conduction of Open Day. On Open day students get to see their end semester theory answer papers. This ensures transparency in assessment.
2. There is scope for students to ask for revaluation in both theory and practical examinations.
3. Conduction of on-screen exams for ED and FCP courses.
4. New resolution made in the exam system regarding rechecking of practical exam answer book if student fails in that respective examination.
5. Special Internships are conducted for the students involved in unfair means in collaboration with various NGO's.

2.9 No. of faculty members involved in curriculum restructuring/revision/syllabus development as member of Board of Study/Faculty/Curriculum Development workshop

17	162	23
----	-----	----

2.10 Average percentage of attendance of students

77.84

2.11 Course/Programme wise distribution of pass percentage: **Based on YPI**

Title of the Programme	Total no. of students appeared	Division					
		Grade point 9-10	Grade point 7.0-8.99	Grade point 5.0-6.99	Grade point 4.0-4.99	Fail	Pass %
B.Tech in Computer Engineering	145	15	122	07	Nil	01	99.31
B.Tech in Electronics Engineering	130	02	89	25	Nil	14	89.23
B.Tech in Electronics & Telecommunication	144	17	119	07	Nil	01	99.31
B.Tech in Information Technology	152	09	124	17	Nil	02	98.68
B.Tech in Mechanical Engineering	152	23	121	05	Nil	03	98.03

M.Tech in Computer Engineering	12	—	07	04	—	01	91.66
M.Tech in Electronics Engineering	11	----	03	04	----	04	63.64
M.Tech in Electronics & Telecommunication	10	---	03	04	---	03	70.00
M.Tech in Information Technology(Information Security)	08	01	06	01	---	---	100
M.Tech in Mechanical Engineering (CAD CAM)	07	02	04	01	---	---	100
M.Tech in Mechanical Engineering (Energy Engg)	11		09	02	---	---	100

2.12 How does IQAC Contribute/Monitor/Evaluate the Teaching & Learning processes:

The teaching learning process as on date are not directly streamlined through IQAC but slowly we are doing effort to streamline by initiating following

1. UG project evaluation and documentation uniform to all departments by IRRC
2. PG thesis schedule by IRRC
3. Updating ICT activities on website link of 'Indo Universal Collaboration for Engineering Education' (IUCEE)
4. Regular schedule of audits for exam, academic and administration

2.13 Initiatives undertaken towards faculty development

<i>Faculty / Staff Development Programmes</i>	<i>Number of faculty benefitted</i>
Refresher courses (online certificate courses (audit & credit) undergone by faculty)	51
UGC – Faculty Improvement Programme (Sponsored for Higher studies)	6

HRD programmes (Programs related to HR (HOD training Program, Leadership training program etc), and programs sponsored by HRD (e.g. ICT FDP by IITB)	105
Orientation programmes (New faculty orientation program, 1 or 2-Day workshops/ Seminars)	85
Faculty exchange programme	NIL
Staff training conducted by the university (qualification improvement/additional qualification taken up by staff)	9
Staff training conducted by other institutions (staff who attend workshops/ seminars by other Institutions)	42
Summer / Winter schools, Workshops, etc. (STTPs)	70
Others (STTPS/Workshops/Seminars Organized by faculty)	51

Note: If a faculty has taken up multiple programs under same category, the count is taken accordingly

2.14 Details of Administrative and Technical staff

Category	Number of Permanent Employees	Number of Vacant Positions	Number of permanent positions filled during the Year	Number of positions filled temporarily
Administrative Staff	38	NIL	03	02
Technical Staff (Lab.Asst, Tech Asst., Instructor)	65	NIL	02	01
Other (Class IV)	37			40*

* 9 office boys, 24 house-keeping staff and 7 security staff are appointed on contract basis

Criterion – III

3. Research, Consultancy and Extension

3.1 Initiatives in Sensitizing/Promoting Research Climate in the institution

- Faculty members are encouraged to write the research proposals to different funding agencies. Seed funding is provided to the faculty members for prototype development. The proposal writing session were conducted for faculty members so as to increase the participation in the research activities.
- The various funding agencies were approached such as, Rajiv Gandhi Technology Mission of Maharashtra State, DRDO, NMRL, University, Small and Medium Scale Industries.
- The internal review for the major proposal is carried out before final submission of Major proposal for funding. The few proof of concept was developed and further they have been submitted as a major proposals to DST and other funding agencies.
- The financial support provided by various funding agencies helped the college to develop the new laboratory equipments. The new experiments were added in the curriculum based on the new development. The hands on courses are floated on the various projects developed by college. The facility is being extended to the other institutes. The internships and research projects were offered to the UG-PG and Ph.D Students.
- Currently college has 06 international patents as against the 1 last academic year. The work on few more Patents and copyrights are on-going. There is continuous support in terms of finance incurred, infrastructure, and recognition to the various activities carried out by the faculty members.

3.2 Details regarding major projects

	Completed	Ongoing	Sanctioned	Submitted
Number	-	01	01	16
Outlay in Rs. Lakhs	-	37,11,000	12,00,000	4,90,62,818

3.3 Details regarding minor projects

	Completed	Ongoing	Sanctioned	Submitted
Number	12	09	-	05
Outlay in Rs. Lakhs	10,98,090	5,97,900	-	33,30,000

3.4 Details on research publications

	International	National	Others
Peer Review Journals	32	4	NIL
Non-Peer Review Journals	10	2	NIL
e-Journals	NIL	NIL	NIL

Conference proceedings	72	6	NIL
------------------------	----	---	-----

3.5 Details on Impact factor of publications:

Range Average h-index Nos. in SCOPUS

3.6 Research funds sanctioned and received from various funding agencies, industry and other organisations

Nature of the Project	Duration Year	Name of the funding Agency	Total grant sanctioned	Received
Major projects	03	DST/DST-RFBR	49,11,000	20,63,866
Minor Projects	08	University of Mumbai	2,81,000	1,42,400
Interdisciplinary Projects	-	-	-	-
Industry sponsored	-	-	-	-
Projects sponsored by the University/ College	07	KJSCE	335048	335048
Students research projects <i>(other than compulsory by the University)</i>	01	KJSCE	18137	18137
Any other(Specify)	-	-	-	-
Total	-	-	5545185	25,59,451

3.7 No. of books published i) With ISBN No. Chapters in Edited Books

ii) Without ISBN No.

3.8 No. of University Departments receiving funds from

UGC-SAP CAS DST-RFBR
DPE DBT SERB/funds

3.9 For colleges Autonomy CPE DBT Star Scheme
INSPIRE CE Any Other (specify)

3.10 Revenue generated through consultancy

3.11 No. of conferences organized by the Institution	Level	International	National	State	University	College
	Number	NIL	NIL	NIL	NIL	NIL
	Sponsoring agencies	-	-	-	-	-

3.12 No. of faculty served as experts, chairpersons or resource persons 37+9+40= 86

3.13 No. of collaborations International NIL National 05 Any other 03

3.14 No. of linkages created during this year NIL

3.15 Total budget for research for current year in lakhs :

From Funding agency 12,00,000 From Management of University/College 6,00,000
Total 18,00,000

3.16 No. of patents received this year

Type of Patent		Number
National	Applied	-
	Granted	-
International	Applied	-
	Granted	02
Commercialised	Applied	-
	Granted	-

3.17 No. of research awards/ recognitions received by faculty and research fellows
Of the institute in the year

Total	International	National	State	University	Dist	College
04	--	01	--	--	--	03

3.18 No. of faculty from the Institution who are Ph. D. Guides and students registered under them 10
09+01*

*Registered at KJSCE under Guide outside KJSCE

3.19 No. of Ph.D. awarded by faculty from the Institution NIL

3.20 No. of Research scholars receiving the Fellowships (Newly enrolled + existing ones)

JRF 1 SRF Project Fellows Any other

3.21 No. of students Participated in NSS events: **NIL**

University level	<input type="text"/>	State level	<input type="text"/>
National level	<input type="text"/>	International level	<input type="text"/>

3.22 No. of students participated in NCC events: **NIL**

University level	<input type="text"/>	State level	<input type="text"/>
National level	<input type="text"/>	International level	<input type="text"/>

3.23 No. of Awards won in NSS: **NIL**

University level	<input type="text"/>	State level	<input type="text"/>
National level	<input type="text"/>	International level	<input type="text"/>

3.24 No. of Awards won in NCC: **NIL**

University level	<input type="text"/>	State level	<input type="text"/>
National level	<input type="text"/>	International level	<input type="text"/>

3.25 No. of Extension activities organized

University forum	<input type="text"/>	College forum	<input type="text" value="17"/>		
NCC	<input type="text"/>	NSS	<input type="text"/>	Any other	<input type="text"/>

3.26 Major Activities during the year in the sphere of extension activities and Institutional Social Responsibility

The following activities though directly not under IQAC, these are part of college.

A. KJSCE Outreach Center for Civil Defence, Maharashtra State: A social initiative to create smart netizens.

Department of civil defence is responsible to take care of citizens in case of natural and manmade disasters. Cyber Security is taken as a major manmade disaster of the current era. With the vision of

taking our social responsibilities to a broader mindset and reaching out to as many people as possible KJSCE-Outreach Council was formed with a motto of fulfilling our social responsibilities .

KJSCE Outreach Center has taken up the social responsibility in collaboration with department of Civil Defence ,Maharashtra to create a sense of awareness among the general public to take preventive and precautionary measures against cybercrimes and calamities. On the Auspicious day of Maharashtra Din May 1,2017, KJSCE and Department of Civil Defence , Maharashtra state inaugurated KJSCE Outreach Center.

This team is working under the mentorship of Mr. Sanjay Pandey, IPS, Director of Civil Defence and Commandant General, Home Guards, Maharashtra State.

KJSCE-Outreach Center has conducted many seminars on cyber security and an event in collaboration with Department of Civil Defence on Fire Safety and First Aid.

1. Cyber Security Awareness Program. On Wednesday ,7 th February,2018 from 10 a.m-12.30 p.m at K.J.Somaiya College of Engineering ,Vidyavihar for Office Staff of K.J. Somaiya Engineering and Polytechnic. Speakers : Mahir Dave & Sarthak Shah
2. Cyber Security Awareness Program on Thursday ,15 th February,2018 from 10 a.m-12.30 p.m at Civil Defence Staff College, Cross Maidan, Mumbai for Civil Defence Employees. Speakers : Mahir Dave & Sarthak Shah
3. Cyber Security Awareness Program on Saturday ,17 th February,2018 from 10 a.m-12.30 p.m at K.J Somaiya ,Vidyavihar for Engineering Faculty. Speakers : Mahir Dave & Sarthak Shah
4. Fire Safety Awareness Program on Tuesday, 6th March 2018 from 3:00 to 5:00 p.m at Auditorium, A Building, KJSCE Vidyavihar for Students and Faculties of Somaiya Ayurvihar and Vidyavihar Campus. The Chief Guest was Shri V. Ranganathan Hon. Secretary Somaiya Vidyavihar Mumbai and Special Invitee was D.G.P Shri. Sanjay Pandey, I.P S, Director of Civil Defence and Commandant General Home Guard, Maharashtra State. Demo by: Civil Defence Team.
5. Cyber Security Awareness Program on Tuesday, 3 rd April,2018 from 12 noon at PWD Compound, Government Quarters, Kamraj Nagar, Ghatkopar(E) for Wives of government employees. Speakers : Mahir Dave & Sarthak Shah

B. Providing support to PwD category Students

Various training programs/workshops were conducted for PwD category students to make them self-reliant. Following activities were conducted:

1. Workshop on “Inclusive Education Pedogogy for Science and Engineering Schooling to the Persons with Disabilities.”
2. Training on JAWS screen reader software for Low-vision students
3. Need Assessment of PwD students by Centre for Disability Studies and Action, TISS, team for Individualized Education Programme (IEP), March 2018.

Further, in order to extend multi-dimensional support to PwD students, the college decided to start Resource Centre for such students. The Committee for Resource Centre, KJSCE was constituted comprising External Advisors, Parent representative, student representative along with the external members

Steps towards formalizing the association of KJSCE Resource Centre for PwD students with TISS programs like, Initiative on Enabling Inclusion and Accessibility for students with Disability in Higher Education, I-Access buddy etc. and to finalize the activities to be conducted in the forthcoming Academic Year were taken.

C. KJSCE PUSH Organisation (People United for Student Help):

Few like-minded employees of KJSCE came together to establish PUSH-KJSCE (People United for Students' Help), which is now a regular practice. Contribution from various inspired stakeholders such as employees, students, alumni and well-wishers are collected to pay fees of deserving students. In 2017-18, 17 needy students from computer, IT, Electronics and Mechanical got benefitted through disbursement of amount Rs.905886.

D. BloomBox, Entrepreneurship Cell KJSCE

Sell-a-thon (Event with a Social Initiative) organized from 18th to 21st September, 2017 was a Social Entrepreneurship event conducted by the council association with the NGOs IDOBRO and Nareshwadi. The teams had been given some products which they had to sell in open market all over Mumbai and the team with maximum sales won. The main objective of the event was to help students learn the art of sales and promotion by helping local artisans.

E. Green Building Initiative

- As a initiative of the “Green Building” concept, a competition event was organized as a shield event in Symphony-2018. Students from all the departments participated and gave powerpoint presentations to express their ideas about transforming KJSCE building into ‘Green Building’. Five groups presented their views and suggested various ways in which the execution of the project can be initiated. Two prizes were awarded for best ideas. The participating students were appointed as the members of the council (to be formed) for the KJSCE- Green Building project.
- Efforts to make campus eco-friendly The college has given e-waste (40kg) for recycling to ECO-ROX and recieved a letter of appreciation for the same.

F. Street play team of college “Rhapsody” perform different social problems

G. The extension activities and Institutional Social Responsibility activities of KJSCE are tagged under the name “**PARVAAH**”. The theme adopted this year for PARVAAH was “Health and Sanitation”. Different activities were carried out under this theme as follows:

1. Book Donation Drive: 15th September - 22nd September

The book donation drive was successfully completed and Team Parvaah collected a total of 376 books. These books were donated to Ratna Nidhi Trust who then provide these books to underprivileged children in and around Mumbai. As reported by Ratna Nidhi Trust, these books were donation to children residing in slums of Panvel.

2. Versova Beach Cleanup: 16th September 2017 onwards

In its 22 week long association Parvaah has contributed in cleaning the beach through its team and volunteers, collecting a total of 8,500 kg of trash. It plans to continue for the same cause and hopes to see the beach plastic-free.

3. Visit to Old Age Home: 22nd November 2017

Team Parvaah visited the Shri Nityanand Ashram located in Mira Road. It is not only houses an orphanage but also an old age home. The team interacted with the elderly and engaged in conversations with regards to their day-to-day life, gaining an insight into the harmonious working of the Ashram. The team then moved on to interact with the children of the lot and indulged them in interesting games pertaining to music, dance, art, and much more. The children were encouraged to draw and made promising pictures using the colours and notebooks the team had donated to the institution. The team also donated groceries and stationary to the Ashram with a view of helping the institution flourish.

4. Signal Shala: 21st December 2017

Parvaah, in collaboration with Signal Shala, has endeavoured to organise a short demonstration on our cause this year, "Health and sanitation". Signal Shala is an organization rehabilitates homeless children, provides them with an education, and a decent & stable lifestyle. Underprivileged children who have found abode in Signal Shala will be educated about various ways to maintain cleanliness in the environment and about personal sanitation as well. On the 21st of December, these children will enact their learnings as a small visual act at the Teen Hath Naka signal in Thane.

5. Secret Santa Celebration: 25th December 2017

In accordance with its yearly endeavour, Parvaah celebrated Christmas with the children of Byramjee Jeejeebhoy Orphanage, Matunga. This follows Parvaah's deep-rooted tradition of spreading joy amongst the underprivileged. The event started with the volunteers of Parvaah playing fun games with the children of the orphanage. This was followed by an extended session of song and dance. The students then embraced the Christmas spirit by cutting the Christmas cake with the volunteers. One of our own dressed up as Santa Claus and distributed goodies to the children and interacted with them. The volunteers distributed chocolates and stationery amongst the children during dinnertime, and hence the event concluded with a smile on their faces.

6. Pride March: 3rd February

The volunteers of Parvaah attended and took part in the LGBTQ+ Pride Walk on 3rd February at the August Kranti Maidan. Parvaah has been always supportive of the LGBTQ+ community's call for equal rights and took it up as their cause last year. The volunteers marched alongside the members of the community to support their cause and show solidarity. The organizers were astounded by the support shown by college students and applauded their efforts. The evening ended with volunteers interacting with the members of the LGBTQ+ community in order to empathize more with them on the issues they face with regards to the law and societal norms.

Criterion – IV

4. Infrastructure and Learning Resources

4.1 Details of increase in infrastructure facilities:

Facilities	Existing	Newly created	Source of Fund	Total
Campus area(built-up)	19435.45 sqm	NIL	-	19435.45 sqm
Class rooms in number (UG + PG)	46	--	--	46
Laboratories in number	67	--	--	67
Seminar Halls in number (UG + PG)	11	--	--	11
No. of important equipments purchased (\geq 1-0 lakh) during the current year.	--	32	--	32
Value of the equipment purchased during the year (Rs. in Lakhs)	--	208.18 lakhs	--	208.18 lakhs
Others- Renovation and upgraded TPO cell	--	204 sqm, 53 lakhs	--	204 sqm

4.2 Computerization of administration and library

The library collection is entered in Bookworm database, same can be retrieved on surfing.
The transactions are automated. Online renewal facility, Online reservations, Late fee calculated by the system.

4.3 Library services:

	Existing		Newly added		Total	
	No.	Value	No.	Value	No.	Value
Text Books	27422	10055484	805	560041	28227	10615525
Reference Books	13345	9993469	274	382109	13619	10375578
e-Books	153	625000	-	0	153	625000
Journals	92	227030	95	246489	95	246489
e-Journals	1121(7)	5007561	1405(7)	5861034	1405(7)	5861034
Digital Database	3506	0	48	0	3554	-
CD & Video	27422	10055484	805	560041	28227	10615525
Others (specify)	-	-	-	-	-	-

4.4 Technology up gradation (overall)

	Total Computers	Computer Labs	Internet	Browsing Centres	Computer Centres	Office	Departments	Others
Existing	1525	50	155mbps (1:1)	01 (CCF)	05	--	06	--
Added	173	02	--	--	--	--		--
Total	1698	52	155mbps (1:1)	01 (CCF)	05	--	06	--

4.5 Computer, Internet access, training to teachers and students and any other programme for technology upgradation (Networking, e-Governance etc.)

Total 155mbps (1:1) internet bandwidth using three tier network i.e. Core, Distribution and Edge switches. All core and distribution switches are connected via OFC backbone fiber cable. Classrooms are well equipped with projectors, internet connection. Faculty & staff are sent for various training programs. Please refer criteria 2 (2.13 table) for the same.

4.6 Amount spent on maintenance in lakhs :

i) ICT

346.30

(Computers, Software, software AMCs, Library Books & e- Journals, Projectors, Internet Expenses)

ii) Campus Infrastructure and facilities

606.65

(Common Infrastructure. Facilities provided by SVV, College Repairs & Maintenance

iii) Equipments

118.57

(Laboratory, Office, Networking Equipment)

iv) Others

21.40

(Furniture & fixtures)

Total :

1092.92

Criterion – V

5. Student Support and Progression

5.1 Contribution of IQAC in enhancing awareness about Student Support Services

The student support services offered are:

- Orientation program is conducted for the F. Y. B. Tech. students, where in all the coordinators & conveners of different committees briefed the students about curricular & extracurricular activities
- The awareness about student support services like placement and training, common computing facility available for surfing, Grievance redressal committee, students mentoring etc., offered by the institution is given by IQAC.
- Organizing Technical events such as Prakalpa, e-Yantra, Abhiyantriki etc.
- Fostering Technical and personality growth of students on the aegis of various students' chapters such as IETE, ISTE, EESA, MESA, CSI, SAHAS, IEEE etc.
- Students are encouraged to participate in various competitions/conferences in India and abroad like Robocon, BAJA, FSAE, etc.
- Course wise remedial coaching is conducted for slow learners.
- Awareness programmes are conducted to provide the details about the higher studies in India and abroad.
- Students are encouraged for undertaking projects and writing papers for publications.
- Entrepreneurship Development Cell organizes periodical meetings with industrialists, entrepreneurs and chief executives of various concerns to enhance the entrepreneurship skills among the students.
- Industry Institute Interaction cell builds a good relationship between the Industry and Institute forth welfare of the students by organizing regularly guest lectures, seminars, workshops, conferences, industry visits, in-plant training, internships and campus connect programmes.
- Placement & Training Cell organizes various training programmes to mould the students with core competency and employability.
- Student support services like multi-disciplinary forums, association with professional bodies, alumni interactions, student forums/clubs, language laboratory, awards/prizes to student achievers are provided. Student development cell provides monetary assistance for paper presentations in conferences as well as for projects.
- Women Development Cell empowers the girl students and female faculty members.
- The undertaking of Anti-ragging committee Affidavit is taken from students.
- Students Counselling and Grievance redressal by faculty and college grievance committee members.

5.2 Efforts made by the institution for tracking the progression

- Tracking the progress of students through continuous assessment which includes IA (Internal assessment tests), Term tests and End semester exams.
- Focus on planning and effective implementation of teaching learning to ensure achievement of learning outcomes. In this regards gaps in curriculum are identified and necessary actions are taken.

- Monitoring participation and achievement of students in co-curricular activities. Students development Cell policy is in place to encourage students by funding for such participations.
- Identification of slow learners and remedial coaching for their specific needs.
- Interim reviews for Projects and Seminars
- Analysis of presentation /communication skills during regular presentations like project exam, industrial training presentation etc.
- Tracking of success rate and dropout rate.
- Encouragement for internships including those who have lost a year.
- Organizing Trainings for resume building , soft skills etc by placement cell.
- Encouragement for higher studies / competitive examinations.
- Interactions through Alumni Cell

5.3 (a) Total Number of students

UG	PG	Ph. D.	Others
2844	143	10	-

(b) No. of students outside the state

16

(c) No. of international students

10

No	%
2161	76

Men

No	%
682	24

Women

	Last Year (2016-17)						This Year (2017-18)					
	General	SC	ST	OBC	Physically Challenged	Total	General	SC	ST	OBC	Physically Challenged	Total
UG	2716	8	1	83	34	2842	2694	14	-	101	35	2844
PG	147	-	12	33	-	192	118	12	-	13	-	143
Ph.D.	10	-	-	-	-	10	10	-	-	-	-	10

Demand ratio **1:5.03**

Dropout % **3.25**

5.4 Details of student support mechanism for coaching for competitive examinations (If any)

- Training and placement cell organizes various sessions on Aptitude / Quantitative / Communication skills for students.
- GATE software is procured where the students can practice previous year's GATE question papers.
- Career and Education Opportunities Abroad by KRAFT Education Services (KES) – Mr Manmohan Kohli was conducted on April 9, 2018.

No. of students beneficiaries : 58

- Students were taken special classes hours for GATE examination coaching

No. of students beneficiaries: 38

5.5 No. of students qualified in these examinations

NET	<input type="text" value="0"/>	SET/SLET	<input type="text" value="0"/>	GATE	<input type="text" value="24"/>	CAT	<input type="text" value="21"/>
IAS/IPS etc	<input type="text" value="0"/>	State PSC	<input type="text" value="0"/>	UPSC	<input type="text" value="0"/>	Others	<input type="text" value="15"/>
GRE	<input type="text" value="126"/>	TOEFEL	<input type="text" value="89"/>	GMAT	<input type="text" value="1"/>		

5.6 Details of student counselling and career guidance

Counseling

- Counseling is provided to the students as a psychological support.
- Students are encouraged to convey their personal issues, stress related issues, emotional and behavioral problems to the counselor Dr. Shrirang Joshi.
- Student proctors deal with the students having social, economic and personal problems and also for their improvement in the studies.

Career guidance

The Career Guidance Cell is catering to the needs of students with the following objectives.

- Organized training program to create awareness on the importance of higher studies in India and abroad.
- Students are given guidance for Entrepreneurship thorough E-cell and Bloom-Box.
- Communication skills of the students were improved by giving soft skills training.
- Organized expert lectures such as 'Campus to Corporate' which helped the students to understand the corporate strategies and corporate culture.

No. of students benefitted by (Training Programme): Career and Education Opportunities Abroad

5.7 Details of campus placement

DEPARTMENT	<i>On campus</i>			<i>Off Campus</i>
	Number of Organizations Visited	Number of Students Participated	Number of Students Placed	Number of Students Placed
COMP	51	146	97	NIL
ETRX	16	175	70	2
EXTC	22	144	96	2
IT	21	145	105	NIL
MECH	23	152	69	NIL
TOTAL	131	762	437	4

5.8 Details of gender sensitization programmes

- Women Development Cell promotes the general well-being of female students, teaching and non-teaching women staff of the college.
- A lecture on “PCOS/PCOD Polycystic ovarian syndrome/disease” by Dr. Neelima Mantri, Bombay hospital was arranged on September 13, 2017.
- Special awards are given to the girl students for their special achievements and contribution to the society.
- International Women’s Day was celebrated on March 7,2018 to appreciate the remarkable contribution of women to our society. Mrs. Naina Diwekar, Mumbai Railway Police was chief guest.
- Women Development Cell organized a writing competition on women empowerment “She inspires us”to enhance the confidence level of girl students on March 8,2018.
- Sanitary napkin vending machine is installed in the college
- Suggestion / Complaint box is placed at administrative block on the campus which is accessible to students
- Parvaah, the ISR initiative of KJSCE takes up sensitization activities for LGBTQ community.

5.9 Students Activities

5.9.1 No. of students participated in Sports, Games and other events

State/ University level National level International level

No. of students participated in cultural events

State/ University level National level International level

5.9.2 No. of medals /awards won by students in Sports, Games and other events

Sports : State/ University level National level International level

Cultural: State/ University level National level International level

5.10 Scholarships and Financial Support

	Number of students	Amount
Financial support from institution	131	1,78,32,776
Financial support from government	584	4,26,46,532
Financial support from other sources	45	25,93,014
Number of students who received International/ National recognitions	-	-

5.11 Student organised / initiatives

Fairs : State/ University level National level International level

Exhibition: State/ University level National level International level

5.12 No. of social initiatives undertaken by the students

5.13 Major grievances of students (if any) redressed: NIL

Criterion – VI

6. Governance, Leadership and Management

6.1 State the Vision and Mission of the institution

VISION

K. J. Somaiya College of Engineering envisages to become a World Class Centre of Learning in the field of Engineering Sciences where pursuit of Knowledge is leavened with Human Values of Courage and Compassion to produce Engineers in the service of Humanity.

MISSION

To be leading institution of learning in the field of Engineering Sciences with an activity engendered scholarly ambience, encouraging diversity of thought and expression.

To provide an enabling environment for attaining excellence through an on-going dialogue with industry and benchmarking ourselves with the best amongst peer institutions.

6.2 Does the Institution has a management Information System

There are software applications for accounts, attendance monitoring and leave management, Library management , FY admissions, examinations etc.

6.3 Quality improvement strategies adopted by the institution for each of the following:

6.3.1 Curriculum Development

- Being autonomous institute, UG syllabus will be updated after every 4 years. The first autonomous curriculum was released in 2014-15 and implemented in subsequent years for FY,SY ,TY and LY completing one cycle . Hence revised curriculum will be implemented from 2018-19 for FY.
- A core committee is formed at college level representing all departments which defines the general skeleton of curriculum refereeing to AICTE guidelines. This ensures uniformity of scheme and credits across all departments.
- Every department has formed syllabus committee who designs department level syllabus as per guidelines from core committee.
- Feedback about curriculum is recruiters designed and collected from stakeholders like students, alumni, parents, recruiters
- Referring to present syllabus, gaps found by faculty members and stakeholders are incorporated in new syllabus designed
- The syllabus will be presented to departmental subject boards and then to academic board for final approval
- Minor interim modifications in syllabus are approved by syllabus committee at department level. For Major changes the approval from Subject Board and Academic Board is required.

6.3.2 Teaching and Learning

- College has sponsored around 40 faculty members for two FDPs conducted by I.I.T. Bombay on “Foundation Program on ICT in Education (FDP101x)’ and “Pedagogy for Online and Blended Teaching-Learning Process (FDP201x)”
- Around 8 papers in Engineering Education Research were presented in conferences like ICTIEE 2018.
- This has led to increase in usage of course specific Internal Assessment tools, Active learning, Project based learning, Usage of ICT tools, etc.
- There are Online submissions for laboratory for all courses in some departments.

6.3.3 Examination and Evaluation

- Examination Committee meets regularly to address different issues such as PWD students malpractices, etc and resolves them.
- Valuable inputs / suggestions are given by the various committees e.g examination, Result Moderation and Approval, Subject Board, Academic Board, Board of management .
- There is Centralised allotment of Examiners for UG and PG programmes for Project evaluation
- There is uniformity in the test paper evaluation for both the divisions of every class. One faculty member evaluated test papers of both the divisions
- There is mid-term evaluation of final year UG projects.

6.3.4 Research and Development

- The college provides the eco-system to felicitate the good researcher and the Best Research award to teaching faculty in every two years. The award constitutes the certificate and cash price of Rs 10,000.
- Somaiya Trust also provides the S. K Somaiya Excellence in Research Award. The award constitutes the certificate and cash price of Rs 15,000. The award is conformed on those who are working in the Somaiya Group of Institutions. In 2017-18 this award was given to Dr. Santosh Mani, faculty of KJSCE. This helps in development of the faculty and provides sense of achievement to motivate the other faculty members with in the institute.
- Well-defined FDC policy with separate budget per faculty member for R&D activities, study leave for faculty pursuing higher studies under higher studies policy, recognition and awards for R&D activities, etc. has motivated the faculty member greatly to undertake the R&D activities. This is more evident from the points below.
- More faculty members have joined to submit the Minor proposals as compared to academic year 2016-17 to 2017-18. The total proposals submitted during 2016-17 were 15 whereas total proposals submitted in academic year 2017-18 was 33. The faculty members involved in increases to 39 as against to 18 in the previous year.
- The funding which is additionally required for the funded projects is bore by the college. The college also funds the projects which are not accepted by the funding agencies.
- The new funding agencies college approached is DRDO, Bill and Milinda Gates Foundation, KAIR, DST-RFBR, RESEARCH SCHEME ON POWER (RSOP), CPRI, Bangalore and Rajiv Gandhi Technology Mission Maharashtra. Total faculty strength who is working with various research projects has been increased as compared to the last

academic Year. Total 59 proposals are submitted to various funding agencies as mentioned above with total budget is Rs 4,90,81,893/- with more than 50 faculty members contributed in the proposal submissions.

- The motivation among the faculty towards the research leads to filing of one patent and six copyrights during last academic year.

6.3.5 Library, ICT and physical infrastructure / instrumentation

A 204 sqm dedicated Training and Placement cell with computational facility of 60 computers was created. This includes 4 interview rooms, 1 sitting room for group discussion

6.3.6 Human Resource Management

- Transparent Higher Study Policy for faculty – Deputation for Ph.D, Attending workshop/ conference/ workshop.
- Incentive on acquiring higher qualification for faculty
- Incentive on acquiring higher qualification for supporting staff
- There is appointment of full time IAI Incharge and TPO
- Non-teaching staff is sent for skillset improvement training.

6.3.7 Faculty and Staff recruitment

- Advertisement is approved by Board of management (BoM) and University of Mumbai (UoM).
- Wide publicity is given by inviting applications through reputed newspaper advt. (one Local language and one English language)
- Introduced aptitude test in pre-selection process for faculty recruitment – test, presentation & personal interview
- Selection of candidates through properly constituted selection committee
- Recruitment of temporary faculty is done against vacant positions. More salary is offered to experienced faculty selected in temporary positions.

6.3.8 Industry Interaction / Collaboration

- A dedicated appointment of Mr. Sandeep Parmar was appointed as an in-charge of Industry Academia Interface.
- The interaction/collaboration comprises of guest lectures from industry experts, Industry internships for students, Industry sponsored for M.Tech projects, Feedback from recruiters and industry, FDP for faculty members from industry, design and delivery of elective courses, members in Board of Studies, etc.

6.3.9 Admission of Students

Admissions in the college are based on the rules laid by the admitting authority. As per the rules, domicile of Maharashtra seats are by allotment. KJSCE is a 51% Gujarati Linguistic Minority College. The minority seats and the management seats (institute level seats) are surrendered to DTE, Maharashtra as to get good quality students. The admission process is very transparent. All the admissions are merit basis only.

6.4 Welfare schemes for

Teaching	<ol style="list-style-type: none"> 1. Career Advancement Scheme (CAS) 2. LTA Facility for going to home town once in two years 3. Book Allowance of Rs.1000/- per year 4. “K. J. Somaiya College of Engineering Employee’s Co-operative Credit Society Ltd.” managed by the teaching and support staff, which provides loan facility on a short term and long term basis 5. On duty leave for higher studies, attending conferences/STTPs/workshops, delivering expert talks etc. 6. Doctor on campus for medical assistance
Non teaching	<ol style="list-style-type: none"> 1. Time Bound Promotion for NT who worked on the same scale & Grade Pay for continuous 12 years 2. Medical Insurance for the tune of Rs. 2 Lakhs for self, spouse, 2 children and parents OR 3. Rs.3500/- Medical reimbursement per employee. 4. LTA facility for going to home town once in two years OR Maharashtra Darshan 5. “K. J. Somaiya College of Engineering Employee’s Co-operative Credit Society Ltd.” managed by the teaching and support staff, which provides loan facility on a short term and long term basis 6. Uniform for Class IV employees 7. Apron for Workshop Instructors & Chemistry Lab supporting staff 8. Safety shoes for workshop staff 9. Doctor on campus for medical assistance
Students	<ol style="list-style-type: none"> 1. Group Insurance for the tune of Rs. 1.00 Lakh for all the students 2. Financial support from College – PUSH Scholarship for financially weaker students 3. Proctorial System for all the students 4. Psychological counsellor on campus 5. Doctor on campus for medical assistance

6.5 Total corpus fund generated: Rs. 29,441,757.00/- through development fees

6.6 Whether annual financial audit has been done

Yes. Internal financial audit is done every six months and the external financial audit is done annually for each financial year.

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

Audit Type	External		Internal	
	Yes/No	Agency	Yes/No	Authority
Academic	Yes	A committee of auditors having 5 members outside Mumbai University	No	--
Administrative	No	--	--	--

6.8 Does the University/ Autonomous College declares results within 30 days?

For UG Programmes Yes No

For PG Programmes Yes No

6.9 What efforts are made by the University/ Autonomous College for Examination Reforms?

1. Taking feedback from the various stake holders.
2. Extra lectures, Special softwares etc are provided to facilitate the study of visually impaired students

6.10 What efforts are made by the University to promote autonomy in the affiliated/constituent colleges?

There is representation of University in the Board of Studies, Finance Committee, Academic Council, Board of Management of the college.

6.11 Activities and support from the Alumni Association

Alumni Cell and alumni Association(ASECA) of KJSCE aims to stay connected, maintain productive and mutual relationship with our esteemed Alumni using all available online and offline means extensively. It also aim to build a bridge of communication for the alumni to interact and connect with the students to mentor them about career and life. Alumni plays an active role in designing and conduction of some audit courses, mentorship programs, offering internships to existing students, etc.

The activities conducted by the Alumni Cell for the academic year June 2017-May 2018 are:

1. Seminar on the app “College” developed by alumni Mitul Shah on 9th August 2017
2. Alumni panel discussion in FY orientation 2017on 12th August 2017
3. Seminar on Preparation for Placements 13th September 2017
4. KickStart- Mock Placements on 16th and 23rd September 2017
5. The Somaiya Super Sixes Cricket Tournament on 28th October 2017
6. Reunion of Machine Tools Batch of 1993 on 16th December 2017
7. Somaiya Alumni Reunion 2018 organized on 20th January 2018
8. The annual alumni sports meet Replay-2018 held on 17th March 2018

6.12 Activities and support from the Parent – Teacher Association

The college does not have presently Parent – Teacher Association. College has Proctorial system in which a group of students is allotted to a faculty member in FY to care of all the issues related to the allotted students. A proctor acts as a surrogate parent to the students. The communication with the parents regarding the attendance and other issues is taken care by the proctor. The meeting with the parents are also scheduled once a six months. Dean SA is the chief proctor to coordinate the activities of proctorial system.

6.13 Development programmes for support staff

- Various technical training programs in the domain are arranged by departments for their technical support staff to improve their competency levels.
- The few staff members are also sent outside for the training
- Additional NCB increments are given to staff for additional qualifications acquired.

6.14 Initiatives taken by the institution to make the campus eco-friendly

We have given our e-waste (40kg) for recycling to ECO-ROX and received a letter of appreciation for the same. We will be carrying out such similar activity in October 2018.

The possibility of installation of SPV for renewable energy has been evaluated. (I will include this point in the update.)

The evaluation of possibility of sewage treatment plant is in process.

Criterion – VII

7. Innovations and Best Practices

7.1 Innovations introduced during this academic year which have created a positive impact on the functioning of the institution. Give details.

Innovation : Preparing Faculty members for 21st century challenges in Teaching-Learning.

Objective:

To enable faculty members to learn different pedagogy techniques and get acquainted to use of IC Tools.

Context:

Attention span of a learner and trends in student centric learning are changing fast with penetration of technology in life. It is mandatory that faculty members to understand the need for changing role from traditional teacher to facilitator. Features of curriculum in autonomy also demand innovative techniques to be used by faculty members in Teaching-Learning-Evaluation. Use of technology and selection of pedagogical method (e.g. ICT based, project based, etc.) has very important role in improving quality of education. It is also required that faculty members should be trained for use of pedagogy and ICT tools.

Practice:

Keeping this in mind number of trainings were conducted for faculty members in this academic year. Large number of faculty members have undergone training course by IIT Bombay on ICT tools and Pedagogy. As a result, many faculty members are using different innovative tools for teaching and for Internal Assessment.

Category	COMP	ETRX	EXTC	IT	MECH	HSS
Foundation Program in ICT for Education By IIT Bombay	10	11	8	7	0	7
Pedagogy for Online and Blended Teaching-Learning Process by IIT Bombay	8	7	7	4	0	7
AICTE ISTE Sponsored "Innovative Teaching Learning Practices to Achieve Outcome Based Education and Accreditation" at SPIT	2	2	2	2	2	0

KJSCE is become member of IUCEE college consortium (IUCEE - Indo Universal Collaboration for Engineering Education), whose vision is **to improve the quality and global relevance of engineering education in India.**

Apart from trainings for faculty members IUCEE conducts conference every year, where faculty members can share their experiences in teaching, learning and evaluation. There are 5 faculty members having publications in the conference ICTIEE 2018 and 4 faculty members in APICTIEE 2018.

To promote the use of innovation in teaching learning and to learn from experiences of faculty members , a conclave is started from this year, where faculty members of KJSCE can share their experiences in teaching learning.

Typically a group of faculty is involved in designing of curriculum, teaching methodology, laboratory experiments, internal assessments etc. of a course. The thought process in designing and experience of the group in all such activities is presented for all. Evaluation of such work is done by experts in the area of education.

It has been decided to conduct such activity every year.

We believe that efforts towards innovative teaching learning methods will help us improve quality of education in KJSCE.

7.2 Provide the Action Taken Report (ATR) based on the plan of action decided upon at the beginning of the year

Sr. no.	Plan	ATR
1.	To carry out systematic second revision of Curriculum	A core committee was constituted at institute level to design and develop the curriculum for the second cycle of revision. A coordinator was appointed for the same. The detailed syllabus for FY and scheme for the higher semester was formulated.
2.	Conduction of Academic Audit	A panel of members from different Universities was appointed as Auditee. The audit was Conducted on March 09, 2018 and the report was shared with all the departments for improvement, if any.
3.	Development of Mechanism for review of UG/PG Projects and PhD research work	Formation of Internal Review Research Committee
4.	To conduct Orientation Program for the FY admitted students	For the first time a week long FY Orientation Program was conducted by IQAC from 8 th to 12 th August 2017
5.	Conduction of various training and orientation programs by IQAC	1. Training Programme for Newly Joined Faculty Members on 6th, 7th and 8th June 2017 2. Workshop on Inclusive Education Pedogogy for Science and Engineering Schooling to the Persons with Disabilities on 23rd August 2018 3. Training Program on Leadership development and Team Building : Phase 1: 12 & 13th Jan 2018, Phase 2: 30th Apr and 01st May 2018
6.	Taking up extension and ISR Activities	Under Parvaah, the official KJSCE Extension & ISR activity banner, Six various extension/ISR activities were conducted.
7.	Conduction of Exam paper Audit and Exam System Audit	The test question paper and the ESE question paper audits were carried out. Also the ESE paper audit for three years was carried out for SY as an initiative on completion of three years of autonomy for SY. The exam system audit could not be carried out and will be carried out in the next term.
7.	Promotion of ICT based teaching, learning and evaluation	Around 40 faculty members have undergone FDP101x (Foundation program for ICT for education) & 201x (Pedagogy for online & blended teaching-Learning Process) conducted by IIT . Faculty members are using different ICT tools and active learning methodologies.
8.	Device method to handle Practical exam related grievances	New resolution made in the exam system regarding rechecking of practical exam answer book if student fails in that respective examination.

9.	To take efforts to reduce queries and grievances for reassessment/reverification of answer papers	Declaration of Results with grades and grading applied before conduction of Open Day.
10.	Organizing national-level annual sports festival	Skream 2018, national-level annual sports festival of KJSCE, was organized from 6th to 10th January 2018 where teams from different parts of India participated showcasing a fair play.
11.	Infrastructure: To create a separate & self-contained Placement cell	A separate TPO office with the utilities for conduction of aptitude tests & interview was created
12.	To put in efforts to improve placements	<ol style="list-style-type: none"> 1. Invited various organisations for campus placement 2. Conducted Training activities, arranged seminars, workshop to improve the overall placement. 3. Promoted, strengthened and established the Institute link with organisation for various on-going and future Interactions, with the aim of getting students placed in organisation. 4. Facilitated more number of pool campus 5. Requested companies to consider M.Tech Students. <p>All of the above efforts lead to improvement in number of : dream jobs offered, dream companies visited, core companies & dream companies visited, M.Tech Placements</p>
13.	To Promote of research	<p>Different initiatives taken by R&D cell lead to increase in:</p> <ol style="list-style-type: none"> 1. No. of faculty involved in writing proposals 2. No. of funding agencies approached 3. No. of proposals submitted 4. Total amount of funding submitted & received
14.	To improve industry interaction	An Executive for Industry Academic Interface (IAI) is appointed
15.	To increase interaction with alumni	<p>Different events were organized:</p> <ol style="list-style-type: none"> 1. Somaiya Alumni Reunion 2018 on 20th January 2018 2. The annual alumni sports meet Replay-2018 on 17th March 2018 3. Alumni Panel Discussion as part of FY Orientation Program 12th August 2017 4. Seminars by Alumini on 9th August 2017 and 23rs September 2018 5. KickStart- Mock Placement where 15 alumni guided 74 students for group discussions and interview preparations on 16th and 23rs September 6. The Somaiya Super Sixes Cricket Tournament for alumni was organized on 28th October 2017 at Somaiya Ayurvihar by Somaiya Alumni Relations in association with the Alumni Cell <p>Alumni also help in conduction of audit courses, handholding the present students, mentorships, and providing internships to students.</p>
16.	To bring in more Transparency in	The selection process for the assistant professor was a

	the recruitment	three stage process. It included test and presentations by every applicant. The shortlisted candidates then appeared for the interviews conducted by the expert panel constituted as per the norms.
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7.3 Give two Best Practices of the institution (*please see the format in the NAAC Self-study Manuals*)

Best Practice-1

Title : Creating a culture of inclusive education

Objective :

Working towards realizing the vision of our founder, KJSCE has tried to inculcate the culture of inclusive education by creating an ecosystem which gives equal opportunity in all aspects of college life to both; Financially needy students and Physically challenged students

Being Self-financed College, the fee structure of our college may be unaffordable to aspiring students coming from financially weaker section; more severe if they come from outside Mumbai. We at KJSCE, help the needy students financially.

Acquiring professional education has always been a herculean task for a physically challenged student, even when he/she is otherwise competent. Being an autonomous college, we at KJSCE could work towards creating an environment in which students who are physically challenged are able to realize their dream of becoming an engineer.

Best practice 2

Title: Built-in practices in examination system to ensure quality in education

Objective:

Academic autonomy to an institute enables the institute to design the curriculum, set up the rules as well as conduct the examinations. Faculty members thus play a crucial role in almost all related activities. One of the important yardsticks to measure effective attainment of any program is through examinations, wherein a student is assessed critically on various cognitive levels and assessment ensures coverage of course contents. At KJSCE, transparency in procedures and liberty to faculty members are made integral to the examination system, which ensures quality in education.

** (Refer annexure 3 for details of Best Practices)*

7.4 Contribution to environmental awareness / protection

As an initiative of the “Green Building” concept, a competition event was organized as a shield event in Symphony-2018.

Students from all the departments participated and presented their ideas about transforming KJSCE building into ‘Green Building’. Five groups presented their views and suggested various ways in which the execution of the project can be initiated. Mr. Rajdeep Gupta- Head Admin and Facility, Airoli-LTI, was the Chief guest and judge at the event. The students who presented best ideas were appointed as the members of the council for the KJSCE- Green Building project. Following were the ideas presented

Water Saving-

- Monitor water leakages at various points in KJSCE buildings regularly.
- Flush system required in 3rd floor Ladies washroom in A-building.
- Installation of push button taps in all basins.
- Washings from chemistry labs should be used for cleaning floors.
- Washings of floor cleaning should be used for watering plants.
- In Fluid mechanics lab- water can be pumped to a mini store tank after experiment or the tank should be sealed.

Energy/ Electricity Saving-

- Conversion of street lamps to solar street lamps.

- b. Use of LEDs/tubelights.
- c. Expansion of metering system.

General-

- a. Relocation of compost pit or covering it with proper plants.
- b. Use of eco-friendly refrigerants in AC and use of Halons as fire extinguisher.

Ventilation-

- a. Turbo roof generators for B building for removing heat and proper ventilation.

7.5 Whether environmental audit was conducted?

We had done Green Audit in Feb. 2017.

7.6 Any other relevant information the institution wishes to add. (for example SWOT Analysis)

College is preparing to apply for NBA for Mechanical UG Program. The Continuation of Autonomy visit preparation is also taken up by the college.

8. Plans of institution for next year

Quality/Accreditation:

1. Conduction of various training and orientation programs
2. Conduction of various Audits and analysis of the
3. Organising a Quality week & a Faculty Conclave
4. Formulation of a document for roles & responsibilities of all the department committees
5. To promote faculty members to take up online courses related to accreditation
6. To develop excel tool for CO-PO linking and assessment
7. Involved & interactive teaching-learning
8. To give special attention to the NRI/PIO/FN/CIWCG students admitted in FY so as to help them clearing the examination reducing the dropout after first year

Placements :

1. To improve the quality of placements in terms of average salary offered, dream company placements, Number of MNCs visiting, conversion of internships into jobs, etc.
2. To improve soft skills & skills for aptitude test of the students.
3. To invite companies for PG placements and improve their placements.

Industry Academic Interface:

1. Conduction of student & faculty Internship/training/development programs at industry
2. Promote joint Industrial Projects & Research
3. Development program for PWD students & sensitization program

Student Activities, Extension Activities & ISR:

1. Adopting a long-term cause for Parvaah, the social initiative of KJSCE, and conducting on-campus events for the same
2. Calling technical organisations in Abhyantriki who can provide opportunity to college students to go on site/industry visits to technical organizations like B.A.R.C & D.R.D.O etc or provide
3. Conduction of Regular meetings with all council chief along with faculty incharge is required to keep a track of all the co curricular activities in the college.
4. Organize seminars, talks of eminent sports personalities to promote fair play and ethics among all the sports participants

Examination & Evaluation:

1. To improve the quality of question papers by conveying the feedback of external auditor to the paper setters
2. To conduct repeat exams for semester VI which is currently conducted for semester VIII only
3. To take the corrective measures for zero error result declaration
4. Display examination activity calendar on website

Infrastructure

1. Internal white wash of B building
2. Replacement of old OTIS lifts in A building with new ones
3. Replacement of existing fittings with energy efficient tube lights and fans in A Building
4. HOD & IQAC office renovations
5. Renovation of toilet near auditorium

Research & development:

1. Conduct the session for the IPR and Copy right
2. To encourage submission of mega projects to various funding agencies.
3. To increase the student participation in the R&D activity
4. To extend technical support to mega projects

HR & Administration:

1. To prepare HR Manual manual that will provides a means for formalized, systematic documentation and communication of policies and practices established by the college Management.
2. To create a data base and information system where all personal information like Name, address, DOB, contact details, experience, PF No., PAN, Aadhar as well as professional information like DOJ, growth in the organization, salary details, retirement etc. related to each and every employee will be stored in one window, which can be used for different purpose.
3. To prepare exhaustive administrative calendar

Name Dr. Sonali Patil

Coordinator, IQAC

Name Dr. Shubha Pandit

Chairperson, IQAC

Abbreviations:

KJSCE	-	K J Somaiya College of Engineering
AOCC	-	Add on Credit Course
AOAC	-	Add on Audit Course
IAI	-	Industry Academia Interface
TPO	-	Training & Placement Office
BOM	-	Board of Management
UoM	-	University of Mumbai
FDP	-	Faculty Development Program
SDP	-	Student Development Committee
STTP	-	Short term Training Program
ILFM	-	Institute Level Faculty Meeting
FY	-	First Year
PWD	-	Persons with Disabilities
AC	-	Audit Course
NCB	-	Non- Cumulative Basic

Summary of Feedback on KJSCE 2014 Curriculum

Annexure II

LY BTech (2014-18 First Autonomous Passing out Batch)

Feedback questions

1. What are the benefits of the Autonomy Curriculum over Mumbai University Curriculum in general?
2. Name some features of curriculum in Autonomy which you think are useful from Employability perspective
3. Scale the usefulness of laboratory component in your curriculum. (On scale of 1-5 ...5 being maximum)
4. Scale the support given for Self-Study component in your curriculum (Wherever applicable). (On scale of 1-5 ...5 being maximum)
5. Do you feel the number of options given for Audit courses / Interdisciplinary Course is sufficient?
6. Do you feel the electives offered covered wide range areas of interest?
7. Have you completed any Internship in last three years?
8. Have you completed any online courses in last four years?
9. Scale the benefits of 40% weightage of Continuous Assessment (CA) in learning process. (On scale of 1-5 ...5 being maximum)
10. Will you recommend increasing the weightage of CA to 50%?
11. Suggest names of courses that need to be added in the curriculum suitable for your branch of study

Department	No of responses	Average of Importance of lab on sale 1-5 (Question 3)	Average of Support of self-study on sale 1-5 (Question 4)	%of students agree that number of options for Audit / IDC sufficient (Question 5)	%of students agree electives offered covered wide range areas (Question 6)	% of students completing Internships in last four years (Question 7)	benefits of 40% weightage of CA on scale of 1-5 (Question 9)	% of students recommend to increase weightage of CA to 50% (Question 10)
COMP	134	3.72	3.45	84.33	78.35	65.68	3.86	57.46
ETRX	66	3.77	3.36	95.45	87.87	68.18	4.12	62.12
EXTC	90	3.72	3.67	86.67	90	71.11	4.05	52.22
IT	137	3.52	3.23	92.7	89.78	52.55	3.82	60.58
MECH	80	3.86	3.53	88.75	80	46.25	4.02	58.75

Benefits of autonomy

- Syllabus practical oriented: 51.8%
- Updated or contemporary contents:54%
- Continuous assessment weightage -50.9%
- Various IA components are useful -64.9%

Features of curriculum in Autonomy which you think are useful from Employability perspective

- Practical orientation
- Audit and Interdisciplinary courses
- More and updated electives
- Workshops, projects

Additional courses suggested

COMP/IT :Python, advanced java, android programming, Blockchain, parallel computing, C# , angular JS,
ETRX/ EXTC : IOT,Big Data,PCBdesign,Machine learning, Python, JAVA, Industrial automation, Robotics
MECH: Robotics, Supply chain management, Business analytics, composite structure

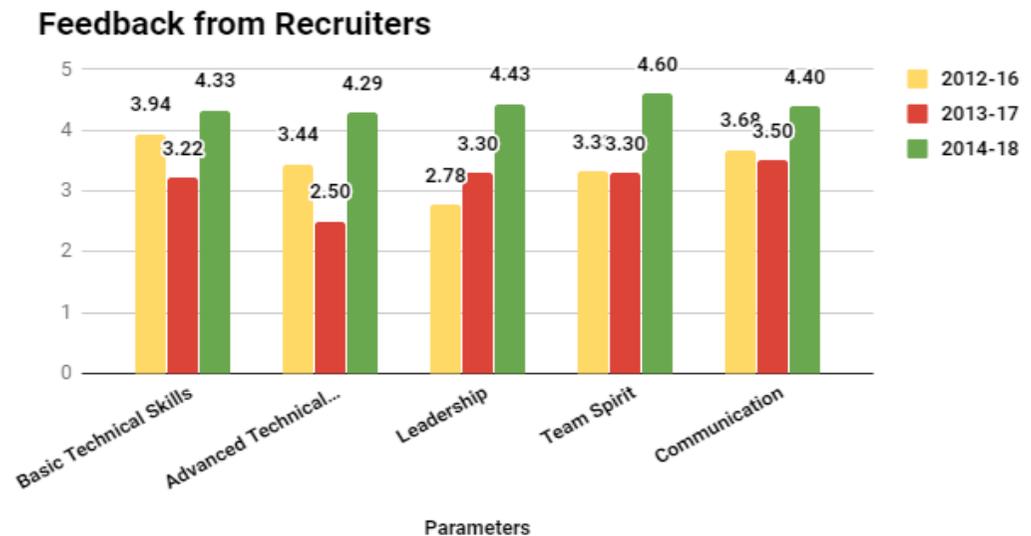
Typical remarks

- Internship opportunity with challenging work needed
- Corporate training is required.
- Use of new or more engaging tools and methodologies in teaching learning process
- Exams and results declared in time

Feedback from recruiters 2017-18

The feedback from recruiters was obtained during placements of 2017-18 for our first autonomous batch admitted in 2014. This feedback is obtained from more than ten regular recruiters representing software as well as core industries. Figure shows comparison with previous batches on different aspects like basic and advanced technical skills, leadership qualities, Team spirit, communication skills

Parameter	Grade Batch Wise on scale of 5		
	2012-16	2013-17	2014-18
Basic Technical Skills	3.9375	3.22	4.33
Advanced Technical Skills	3.4375	2.5	4.29
Leadership	2.775	3.3	4.43
Team Spirit	3.325	3.3	4.6
Communication	3.675	3.5	4.4



Feedback from SY- TY students
(Students admitted in 2015-2016)

Feedback questions

1. What are the benefits of the Autonomy Curriculum over Mumbai University Curriculum in general?
2. Name some features of curriculum in Autonomy which you think are useful from Employability perspective
3. Scale the usefulness of laboratory component in your curriculum. (On scale of 1-5 ...5 being maximum)
4. Scale the support given for Self-Study component in your curriculum (Wherever applicable). (On scale of 1-5 ...5 being maximum)
5. Do you feel the number of options given for Audit courses / Interdisciplinary Course is sufficient?
6. Scale the benefits of 40% weightage of Continuous Assessment (CA) in learning process. (On scale of 1-5 ...5 being maximum)
7. Will you recommend increasing the weightage of CA to 50%?
8. Suggest names of courses that need to be added in the curriculum suitable for your branch of study

Department	No of responses	Average of Importance of lab on scale 1-5 (Question 3)	Average of Support of self-study on scale 1-5 (Question 4)	%of students agree that number of options for Audit / IDC sufficient (Question 5)	benefits of 40% weightage of CA on scale of 1-5 (Question 9)	% of students recommend to increase weightage of CA to 50% (Question 10)
COMP	85	3.56	3.23	64.7	3.53	42.23
ETRX	78	3.41	2.92	83.53	3.79	73.07
EXTC	123	3.7	3.31	79.3	3.89	68.55
IT	182	3.80	3.09	84.62	3.70	39.01
MECH	24	-	3.90	90.62	3.28	75.1

Benefits of autonomy

- Syllabus practical oriented: 44.9%
- Updated or contemporary contents:38%
- Continuous assessment weightage 43.4%
- Various IA components are useful 62.7%

Features of curriculum in Autonomy which you think are useful from Employability perspective

- Option of audit and interdisciplinary courses
- Practical knowledge
- Examinations and results
- Newer technology

Additional courses suggested

Computer /IT: Python programming, Neuro computing, Ethical hacking, Blockchain

ETRX/EXTC- Machine learning, Artificial Intelligence,Python ,

Mechanical : Aerospace Engineering, Basics of accounting, microcontroller programming,Nanotechnology, practicals on CNC Coding

**Feedback from FY students
(Students admitted in 2017)**

Total responses- 140

1. Benefits of the Autonomy Curriculum over Mumbai University Curriculum in general?
 - Syllabus practical oriented: 56.4%
 - Updated or contemporary contents:56.4%
 - Continuous assessment weightage -49.3%
2. 88.6% responses agree that examination of Fundamentals of Computer Programming (FCP) / Engineering Graphics (EG) in on-screen mode was appropriate
3. Engineering Physics and Engineering Chemistry syllabus was found little lengthy. Physics syllabus practical oriented as compared with Chemistry.
4. 74% respondents think activities in EVS helped in bringing awareness towards environmental concerns.
5. Benefits of 40% weightage of Continuous Evaluation in learning process rated as **4.01 on the scale of 1 to 5.**
6. 58.6% students recommend to increase the weightage of CA to 50 %
7. 92.8% students feel addition of specific course on Industrial applications in FYBTech will broaden their perspective

Feedback from Alumni

Feedback questions

1. In KJSCE 2014, weightage of continuous internal assessment was 40% as against that in University of Mumbai being 20%. As a result students are evaluated based on their performance throughout the semester. Kindly scale this feature on scale of 1-5 (5 being maximum).?
2. Kindly scale use of features like Audit courses, IDCs, AOCC, AOAC in professional development of a student on scale of 1-5
3. Can you suggest any new electives which are useful in the branch?
4. Kindly opine on what should be the duration for meaningful internship?
5. At what semester should student undergo internship? Can we make internship mandatory?
6. Kindly suggest any other skill sets students should acquire during the span of four years of engineering.
7. Kindly suggest courses to be added for better employability of students

Total number of responses	244 COMP-28 / EXTC- 38/ ETRX-31/ IT- 90/ MECH or Production – 57
Average for benefits of 40% CA on the scale of 1-5	3.84
scale use of features like Audit courses, IDCs, AOCC, AOAC in professional development of a student on scale of 1-5	4.07
Average Duration of Internship	3 to 4 months
Internship mandatory	203/244= 83.19%

Number of Electives need to be increased

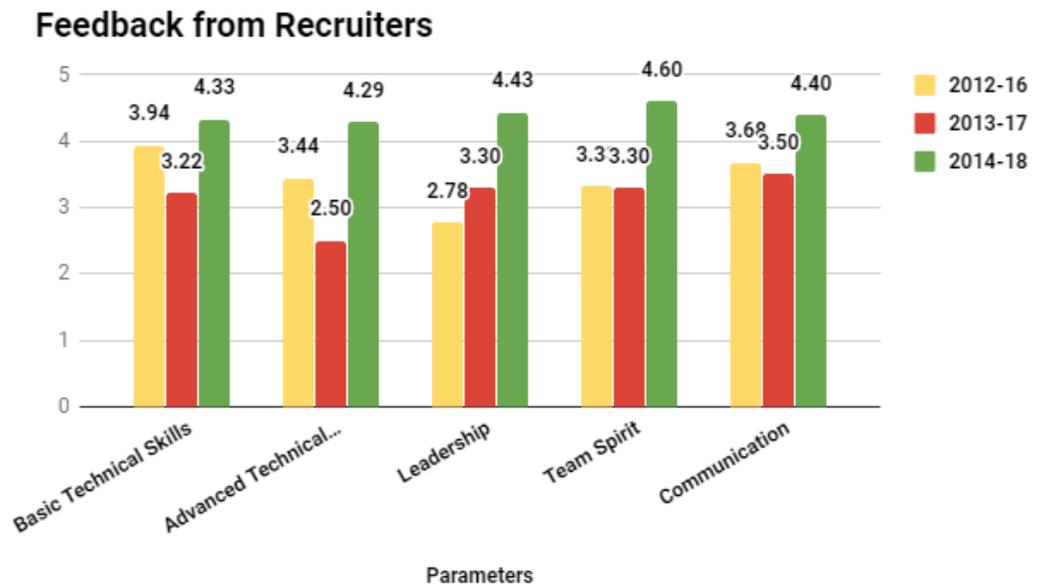
Courses to be included in curriculum: Stochastic Operation research, Renewable energy solutions, Six sigma, JS, IOT, Big Data Analysis, Machine learning, Python coding, Digital Marketing, scientific computation, project management etc

Skill sets: team building, leadership, life skills, people management, Formal communication, Certification courses, right attitude

Feedback from recruiters 2017-18

The feedback from recruiters was obtained during placements of 2017-18 for our first autonomous batch admitted in 2014. This feedback is obtained from more than ten regular recruiters representing software as well as core industries. Figure shows comparison with previous batches on different aspects like basic and advanced technical skills, leadership qualities, Team spirit, communication skills

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Team Spirit	3.325	3.3	4.6
Communication	3.675	3.5	4.4



Feedback from Parents / Professionals

Feedback questions

1. In KJSCE 2014 , weightage of continuous internal assessment was 40 % as against that in University of Mumbai being 20%. As a result students are evaluated based on their performance throughout the semester. Kindly scale this feature on scale of 1-5 (5 being maximum).?
2. Kindly scale use of features like Audit courses, IDCs, AOCC,AOAC in professional development of a student on scale of 1-5
3. Do you feel internship or online courses should be part of curriculum of KJSCE?
4. Kindly suggest courses to be added for better employ-ability of students.
5. Kindly suggest any other skill sets students should acquire during the span of four years of engineering.
6. Do you think Extracurricular and Co-curricular activities of students should be given weight-age in the credit system?

Total number of responses	23
Average for benefits of 40% CA on the scale of 1-5	4.13
scale use of features like Audit courses, IDCs, AOCC,AOAC in professional development of a student on scale of 1-5	4.04
Internship mandatory	17(74%)

- Number of Electives need to be increased
- Courses suggested : Accounts, finance, personality development, python , Artificial intelligence
- Skills : Communications, team work
- Almost 70% parents suggested to give weightage to Extracurricular and Co-curricular activities in credit based system

Best Practice-1

Title : Creating a culture of inclusive education

Objective :

Working towards realizing the vision of our founder, KJSCE has tried to inculcate the culture of inclusive education by creating an ecosystem which gives equal opportunity in all aspects of college life to both; Financially needy students and Physically challenged students

Being Self financed College, the fee structure of our college may be unaffordable to aspiring students coming from financially weaker section; more severe if they come from outside Mumbai. We at KJSCE, help the needy students financially.

Acquiring professional education has always been a herculean task for a physically challenged student, even when he/she is otherwise competent. Being an autonomous college, we at KJSCE could work towards creating an environment in which students who are physically challenged are able to realize their dream of becoming an engineer.

Context:

KJSCE is known for its focus on quality in education. Efforts have been made to achieve this by promoting different methods of teaching-learning; such as encouraging hands-on-learning, supporting student participation in national / international project competitions, etc. Due to the additional facilities required for such initiatives, the fee structure of our college might appear to be unaffordable to aspiring students coming from financially weaker section. So in the past, students from financially weaker section; though competent, either did not take admission in our college or had to seek support from a number of charitable organizations for their education.

The government has created Physically Disabled (PD) quota for admission in engineering colleges for students having more than 40% disability (as certified by competent authority). However, there is no provision in the rule for special attention / consideration for their learning. Hence such students still find it difficult to cope up with a few courses or traditional examination system, etc.

Practice:

With an aim of raising funds in support of such needy students, some employees of our college came together a few years back to establish an organization, “PUSH” (People United for Students’ Help). Student volunteers, who also have been beneficiaries in the past, under the guidance of faculty mentors have formed the PUSH council and have continued to work on their mission even today. The efforts of PUSH were duly supported; not only by the management of college by introducing tuition fee waiver scheme in the year 2014-15 but also by few industries such as Blue Star, JSW Foundation, Ramlal Khetawat Foundation, etc.

Students, having gross annual family income less than defined by respective authorities, are encouraged to apply and avail the benefit. Information regarding such scholarships is made available in the college brochure as well as on the college website. Applications are invited from

needy students and based on scrutiny of application form as per guidelines and review of academic performance/other feedback, list of eligible students is displayed and such students are required to comply with further processing norms.

As a first step of including PD students in the college, college authorities had special training/workshop were conducted for associated faculty members so that they could effectively cater to the needs of such students. Several interactive sessions with the parents of each of student were conducted. This not only helped in creating awareness of specific problems faced by individual student, but also helped in drafting suitable changes in syllabus, adopting different methods of teaching as per their needs, creating improved methods of assessment of performance of individual student or providing necessary infrastructure such as making special toilets, ramps at the entrances of the college, providing interactive readers, etc. in the college. Care is taken while teaching a class which has a hearing impaired student or visually impaired students such as Special individualized classes, setting up different kind of question papers, special help for courses like drawing, use of technology while learning or writing answer papers etc.

Evidence of Success

It can be seen from the table below that in the last 5 years, the college could collect substantial funds and more than 100 students have been benefited.

Funds Collected & No of student beneficiaries

Year	13-14	14-15	15-16	16-17	17-18
Funds collected (in Lakh)	3.25	10.82	18.60	31.18	32.73
No of student beneficiaries	17	24	34	54	58

If minimum eligibility criteria are met every year, a student is supported all through the period of his/her education. Two students beneficiaries of the past, after completion of their education, have already started paying back to PUSH fund as was expected from them.

It can be seen that, in the last five years, every year one student has been admitted under PD quota in the college. While one wheel chair bound student passed out last year from the Dept of Computer Engineering, currently five students are studying in different semesters in the same department. Students have been performing quite well in academics. They interact well with fellow students. They are also quite active in other cultural activities of the college.

Since the financial support from the college ranges from Rs 30,000 to Rs 80,000, students do not need to approach various funding agencies to collect the same amount; which in turn results in savings in their time, energy and anxiety for funds. o Involvement of student volunteers in PUSH council, returning of amount received back to PUSH, etc. helps in developing a culture of handholding amongst students.

- This practice ensures that given a conducive atmosphere, any student even with major physical disability, can fulfil his/her dream to become professionally qualified.
- This not only makes the student confident and enables him/her to become financially independent but it also relieves great tension that all the family members of such students carry all along.
- The effort made by the college to bring the PD students in main stream activities of the college creates awareness amongst all fellow students of the college about taking care of such people in the society.

Conclusion:

Results from both the above practices followed in the college indicate that it is possible to cross the barriers of learners if the policies & practices followed in the education systems support and encourage diversity of students resulting in inclusive education.

Problems Encountered and Resources

Best practice 2

Title: Built-in practices in examination system to ensure quality in education

Objective:

Academic autonomy to an institute enables the institute to design the curriculum, set up the rules as well as conduct the examinations. Faculty members thus play a crucial role in almost all related activities. One of the important yardsticks to measure effective attainment of any program is through examinations, wherein a student is assessed critically on various cognitive levels and assessment ensures coverage of course contents. At KJSCE, transparency in procedures and liberty to faculty members are made integral to the examination system, which ensures quality in education.

Context:

In an autonomous college, most of the times, internal faculty members of the college are involved in almost all examination related activities (paper setting and assessment, practical, oral examinations, etc.). Freedom is also given to faculty members for using different techniques while teaching or assessment.

Practice

KJSCE has well-defined procedures embedded in the administrative set up of examination to ensure quality in teaching-learning and assessment.

- **Coverage of Course Contents**

- a. Syllabus for Tests and Internal Assessment tools are declared at the beginning of the term followed by timely conduction of all assessments.

- b. For every end semester examination, 2 or 3 sets of question papers are drafted by both, internal and external examiner. Manuscript of the randomly chosen question paper is read by one internal course expert to ensure desired focus, coverage of syllabus, etc. prior to actual examination.
- **Unbiased Conduction of Examination**
 - a. All rules related to the examination are made available to students on intranet or through orientation session.
 - b. Well defined rubrics for evaluation of Internal Assessment (IA) , laboratory work , end semester practical examination or viva etc are shared with students well before conduction of any activity.
 - c. Transparency in assessment in all theory examinations (internal-tests, end-semester) is ensured by giving solution to students and by showing them assessed answer sheets on previously declared “Open Day”.
 - d. Any query regarding a question paper can be raised which is then addressed by experts. Well defined procedure is followed for suitable action to be communicated to examiners and students.
 - e. Assessed answer paper can be requested for rechecking (totaling mistakes/ uncorrected paper) or reevaluating (by another examiner).
- **Feedback Mechanism**
 - a. Audit of examination (tests, end semester) is conducted by external experts.
 - b. No of queries in paper, cases of rechecking / reassessment are monitored
 - c. Faculty members are updated on quality of question paper or its assessment.

Evidence of success:

1. Faculty members have made use of their freedom to assess the understanding and knowledge of a concept/course using variety of techniques. This, along with focus in question papers, enables the assessment of a student at various levels of Bloom’s taxonomy.
2. Students seem quite happy and satisfied with the concept of open day, wherein while they go through the assessed papers, they know the solution and scheme of marks ahead of time. Data of attendance of students’ reveals this.
3. No major complaint has been received indicating poor coverage of contents of syllabus, question paper drawn beyond contents, bias in assessment, etc.
4. The no. of cases reported for revaluation has reduced substantially as compared to the past when open days were not conducted. This indicates faith of students in assessment.

Problems encountered and resources

1. The concept of conduction of open day was perceived by few faculty members as a threat to the secrecy to be maintained in examination.

2. Few faculty members were skeptical about possible mischief / nuisance during access to accessed answer papers.
3. Question papers set by external examiner, conduction of question paper audit, declaration of solution of theory paper or rubrics during oral or practical examinations, etc. was perceived as challenge to their integrity by few faculty members.

The above problems were sorted with the following:

1. Proper precautions have been taken to avoid perceived problems in open day. Minor problems were attended and necessary revisions in procedures were made.
2. With discussions on impact of openness in assessment on success of autonomy, faculty members could be convinced on adopting the said practice.