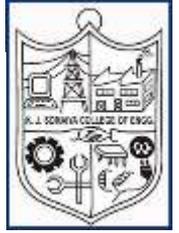# K. J. SOMAIYA COLLEGE OF ENGINEERING, VIDYAVIHAR, MUMBAI-77

KJSCE STRATEGIC PLAN

2019-2024

December 3, 2019

The strategic plan of K. J. Somaiya College of Engineering was developed by the core committee of the College, and vetted by the Advisory Body (earlier known as Governing Board) during the (second) meeting held on 3rd December, 2019.

The first draft of this plan was discussed extensively at two core committee meetings held on 12th October, 2019 and 22nd October 2019. After incorporating the suggestions given by the core committee members, the second draft was prepared. This draft was presented in the IQAC meeting held on 9th November, 2019 and all the recommendations / suggestions as given by the IQAC members were incorporated.

EXECUTIVE SUMMARY

K. J. Somaiya College of Engineering (KJSCE) was established in 1983 at Somaiya Vidyavihar, and currently affiliated to the University of Mumbai. It offers four year bachelors (B. Tech.) degree courses and two year post graduate (M. Tech.) courses in the departments of Computer Engineering, Electronics Engineering, Electronics and Telecommunication Engineering, Information Technology and Mechanical Engineering. It also has research centres in the department of Electronics Engineering, Mechanical Engineering and Computer Engineering. The college has an intake of 120 students each for five undergraduate programs and 18 students each for six post graduate programs. Additionally each research centre has a sanctioned intake of 10 research scholars.

KJSCE is known to be the first private autonomous college in Mumbai. and as a next step in the growth, it is now becoming the constituent academic unit of newly founded Somaiya Vdyavihar Univeristy, which is a self financed university in the state of Maharashtra. It is spread across approximately sixty five acres of green land and stands among the top engineering colleges in the city. KJSCE always has been on a consistent growth path and the same was acknowledged by NAAC in 2017 by awarding 'A' grade under tier –I for a period of five years. KJSCE has good infrastructure and competent faculty members with expertise in electronics & telecommunication engineering, mechanical enginerering, computer engineering, information technology, physics, mathematics, chemistry, and environmental science.The college believes in innovative ways of teaching – learning and has taken initiatives such as student exchange programs and dual degree programs.

The combination of proficient faculty, good infrastructure and conducive environment has yielded positive results. KJSCE students have shown remarkable performance not only in academics but also in co-curricular and extra-curricular activities. Many of our students have won accolades at both national and international level. Students are participating in international competitions such as the Formula One Racing Car competition, Smart India Hackathon, etc. KJSCE has a consistent good placement record and almost, all the eligible students are been placed in reputed companies with many of them having more than one job offer. Additionally many of our students are pursuing higher studies in top universities abroad.

KJSCE is continuously striving to impart quality education in the field of engineering and technology with special emphasis on research activities. Accordingly college is engaged in interaction with industries, reputed educational institutions, research organizations and universities both in India and abroad. KJSCE believes in overall development of students and hence promotes co-curricular and extra-curricular activities as well. KJSCE also has a strong commitment towards society and believes in inclusive education for all. As a part of societal

commitment, recently KJSCE has started inclusion education center for differently - abled students.

Having a strong foundation in place and with a pursuit of achieving excellence in all aspects, college has framed a ten step strategic planning model.

KJSCE TEN STEP STRATEGIC PLANNING MODEL

1. Focus on college vision and mission

2. Envisage desirable outcomes for the college

3. List the stakeholders expectations

4. Review the current trends and identify the factors affecting the college development

5. Underline the focus areas in light of stakeholders expectations

6. Identify the strengths, weaknesses, oppurtunities and challenges for KJSCE. Accordingly decide the general framework for achieving college vision and meeting stakeholders expectations

7. Identify the targets and categorize the into long term goals and immediate priorities

8. Determine the factors contributing in achieving the goals and decide action plan for each of them

9. Benchmark the goals with appropriate measurables

10. Keep a track of steps followed in achieving the goals and take corrective actions if necessary

The ten step strategic planning process uses methodical approach to ensure systematic and comprehensive development of KJSCE. The 2019-2024 strategic plan represents the collective effort of administrators, faculty, staff, students and other stakeholders. The strategic planning process is participatory and ensures shared vision, shared ownership and a dedicated commitment to successful execution of the plan. The success of the plan will enable KJSCE to emerge as a brand name globally.

The proposed plan is presented in the meeting of the Advisory Board, KJSCE held on 3rd Dec 2019 for their approval.

KJSCE STRATEGIC PLAN

IMPLEMENTATION AND MEASUREMENT

VISION

      K. J. Somaiya College of Engineering envisages becoming 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.

QUALITY POLICY

We at K. J. Somaiya College of Engineering (KJSCE) are committed to create quality professionals to meet stakeholders' expectations through,
1. Adaptation to systematic and innovative teaching-learning methodology
2. Promotion of problem based and project based experiential learning
3. Encouragement to multidisciplinary and interdisciplinary research
4. Development of an individual with social, ethical and human values
5. Involvement of stakeholders for transparency in processes
6. Attainment of stakeholder's satisfaction via analysis of periodical feedback, campus placement and examination results

CORE VALUES

Courage, Compassion, Humanity, Quest for knowledge, Integrity and Creativity, Inclusion

COLLEGE PROFILE

With well-defined vision, dedicated leadership, requisite infrastructure, committed staff & versatile students, K J Somaiya College of Engineering (KJSCE) is one of the reputed & sought after college in Mumbai city.

Since academic year 2014-15, the University of Mumbai has conferred Autonomous Status to our college from after receiving appropriate recommendations from University Grant Commission (UGC) & Government of Maharashtra. We are very happy & proud to state that KJSCE is the first self-financed Engineering College affiliated to the University of Mumbai to get this Academic Autonomous Status.

Since inception, the college is committed to imparting quality education to both undergraduate & postgraduate students. It was evident from the A grade awarded by the Government of Maharashtra way back in 1997.The continued pursuit for excellence led to accreditation of all UG programmes by the National Board of Accreditation (NBA) New Delhi from time to time. Currently, the College is also accredited by the National Assessment & Accreditation Council (NAAC) & awarded with 'A' grade from May 2017 for five years. B.Tech (Mechanical Engineering) program granted Accreditation under Tier-I Category by the NBA for the period three years from 2019-20.

Recognition to the college from various agencies also endorse efforts for quality in KJSCE .

- KJSCE is in NIRF ranking position of 182 by Ministry of Human Resource & Development (MHRD) Government of India.
- In the Times of India ranking , KJSCE has been listed 17th rank amongst top 150 engineering institutes in India & ranked 8th in top 100 private engineering institutes for the year 2018.
- Students of KJSCE have achieved positions in various national / International competitions like Smart India Hackathon , Robocon, Formula One Racing Car Competition, etc. to name a few.

To strengthen industry interaction, KJSCE has started an internship & student exchange program. The education in this institution is subtly leavened by human values. The college nurtures aspirations of students by mentoring & guiding them through an emphasis on knowledge and practical skills. Thus, the young students get transformed into global engineers with profound human values. The following programmes currently exist in the college.

Degree (UG-Under Graduate) Programs Offered

The College offers four-year full-time Bachelor of Technology (B.Tech.) degree in the following five programs with an intake of 120 each:

- Computer Engineering
- Electronics Engineering
- Electronics & Telecommunication Engineering
- Information Technology
- Mechanical Engineering

In addition, there is a provision of Direct Second year Engineering admission (DSE) of the degree program for students holding diploma (Lateral entry admissions). Twelve students who have passed diploma in appropriate branch of Engineering are admitted through lateral entry in each of the above mentioned UG programs.

PG (Post Graduate) Programs Offered

Our College also offers two-year full-time Master of Technology (M.Tech.)

Programs with an intake of 18 each in:

- Computer Engineering
- Electronics Engineering
- Electronics & Telecommunication Engineering
- Information Technology (Specialization in Information Security)
- Mechanical Engineering (Specialization in CAD/CAM & Robotics)
- Mechanical Engineering (Specialization in Energy Engineering)

Research Programmes Offered

Our college is a recognized Research Centre by the University of Mumbai offering Ph.D. programme (Technology) in Electronics Engineering, Mechanical Engineering and Computer Engineering.

EXPECTATIONS OF THE STAKEHOLDERS

As a first step in the direction of developing the strategic plan, expectations of various stake holders are recorded. In most of the cases direct modes such as feedbacks were used to get an insight about the expectations of the stakeholders. However, in some cases, expectations were inferred indirectly using documentary evidences available such as reports, minutes of meetings, etc. or even from informal discussions. Expectations of stake holders are vital in deciding the desired outcome of the strategic plan. The expectations of eight stake holders are as listed below.

MANAGEMENT
- Good governance
- Academic excellence
- Global brand
- Sustainability
- Awareness to societal needs and social responsibility

FACULTY & STAFF
- Good academic & healthy working ambience
- Career growth and sustainable development
- Research facilities & incentives
- Academic independence
- Transparency and uniformity in processes
- Faculty / Staff aspirations

STUDENTS
- Good academic & research ambience
- Support for co-curricular & extracurricular activities
- Career guidance, development of interpersonnel skills and placement in reputed companies
- State of the art infrastructure and laboratories
- Experiential learning & opportunity for gromming showcasing talent
- World class learning

PARENTS
- Branding and ranking
- Quality teaching- learning at affordable cost
- Quality placements
- Opportunity for extra curricular and co-curricular activities
- Healthy environment for overall development

ALUMNI
- Connect with alma mater due to strong emotional ties
- Development of a large and strong alumni community for overall connect
- Participation and contribution for betterment of the parent institute

INDUSTRY
- Industry ready candidates with professional attitude and leadership qualities
- Strong core fundamentals and desire for innovation
- Brand name of the college
- Strong Industry-Institution interaction
- Scope for colloborative research and innovation as per societal needs

SOCIETY
- College creating graduates with moral, values,and ethics
- Organization building responsible citizens having awarness about society problems
- Skill development for solving social and community problems
- Resource centre for other institutions
- Consultancy and Continuing Education Programs

REGULATORY BODIES
- Graduates who are directly employable in industries
- Excellence in teaching and learning at par with national and international standards
- Curriculum that imparts quality education and promotes overall development of students
- Infrastructure development promoting experiental learning among students
- Strong Institute-Industry ties for curriculum development, research and consultancy
- Awareness and commitment to solve contemporary issues for the development of the society and nation at large

REVIEW OF CURRENT TRENDS IN THE LIGHT OF TECHNICAL EDUCATION

With emphasis on the vision of the college and expectations of the stake holders, areas for improvement are finalized. For the planning to be effective and successful, a review of the current trends and overall scenario is undertaken. The review considers five major factors that can have a significant impact on the outcome of the plan. The factors in detail are presented below.

R1   Economic Factors

Challenges

- The GDP of India is currently 5 percent, which has slowed down from 5.8 percent expansion in first quarter of 2019. In the long-term, GDP annual growth rate of India is projected to trend around 5.50 percent. A lower GDP for a long duration may adversely affect job growth. Eventually this may have negative impact on the admissions of comparatively expensive education programmes such as Engineering.

Opportunities

- With certain government initiatives such as "Make in India" in place it is expected that some of the engineering sectors may get a boost leading to creation of jobs in core manufacturing sectors. It would be advantageous offering professional educational programmes in such areas.
- Government infrastructure projects such as smart cities, modernization of railways and increasing automation in industries are likely to impart impetus to growth of the Indian industries.
- Government of India has envisioned a policy to substitute the import of electronic products in the following years. Hence, automotive electronics and industrial electronics are estimated to show high growth segments.

R2   Technological Factors

Challenges

- Education 4.0 is expected to have a huge impact on the teaching-learning-evaluation (TLE) process. E-learning/online learning/online examination may replace traditional class room teaching-learning practice. Faculty members need to change their pedagogical skills to match these challenges. The curriculum needs to be designed so as to be in line with state-of-the art-technology. In certain areas such as computer and IT, the challenge is to match with the rapid pace at which the technology is expected to change. Accordingly faculty and staff members would require necessary training, especially the industrial training.

Opportunities

- Although Education 4.0 is expected to make a dynamic change in the TLE process, the focus would still remain on understanding the basic principles of engineering. Education 4.0 would shift

the trend of major learning responsibility from the instructors to the learners. Subsequently faculty members will have huge opportunity to develop online learning resources which would impart knowledge to all students thus overcoming geographical barriers.

- Education 4.0 is a response to the needs of IR 4.0 where human and technology are aligned to enable new possibilities. This would open avenues for industry collaboration in the form of field experience for faculty members and students, real world projects in collaboration with industry. The interaction with the industry is expected to increase with industry taking more initiative for collaborations.

R3   Social Issues and External Factors

- It is seen that nowadays the prime focus of parent community and society are encouraging their wards for better placements and not on real education which will enhance their ward's knowledge. Except IITs and other prestigious technology institutes, most engineering colleges are struggling to provide education to engineering student that would get them suitable jobs. It is also observed that parents and their wards are more inclined towards other education disciplines as compared to engineering. One of the main reasons for this is the higher financial investment required for engineering education with little guarantee of getting a suitable job. This trend may pose grave dangers in the years to come and may negatively influence innovation and entrepreneurship. Placements should be one of the goals in students mind but not the only goal. This need to be conveyed to the students during their tenure of engineering education. Undoubtedly college focus should be to produce industry ready graduates; however the importance of ethics, values, culture, society, environment and humanity also needs to be communicated to the students.
- It is observed that parents face major challenges when it comes to choosing best educational and professional career for their children. It is also noticed that families with low socioeconomic status have inadequate or limited access to resources that may help to promote and support their children's development and readiness for higher education like engineering. Same is the case with many students coming from rural / under-developed areas to urban cities like Mumbai for higher education. Moreover, parents may have inadequate skills and awareness as required to plan child's future career and professional growth.

R4   Regulatory Factors

Challenges

- The regulatory bodies UGC, AICTE, MHRD are coming up with stricter rules in order to bring quality in engineering education. The aim of regulatory bodies is to develop engineering colleges as centres producing industry ready graduates. According to a rule of AICTE, colleges that lack proper infrastructure and report less than 30% admissions for five consecutive years will have to be shut down. The challenge for an engineering college would be to have the necessary infrastructure which needs to be updated from time to time. With a decline in the admission in engineering colleges, it would be difficult to maintain balance between the income and expenditure of the college.

Opportunities

- With more stringent rules by the regulatory bodies, colleges not maintaining minimum standards will not exist. Hence sustainability of a college would itself contribute to the branding, leading to KJSCE becoming students' top choice for education.

R5   Competition from other Colleges / Universities

Challenges

- Many Deemed /Private state universities- Industry lead universities are getting started in many states. Infrastructure and pure teaching-learning may not be a differentiator any more. Quality teaching, overall development, research, ambience and placements could be critical factors hence forth.

Opportunities

- There is a scope for developing an educational system focusing not just on education but on overall development of students. Opportunities can be provided to the students for co-curricular activities, extra-curricular activities, social activities and inter-disciplinary studies. This can be supplemented with student exchange programmes (with other reputed universities), integrated and dual degree programmes.

After analyzing the above factors it is decided that the college will focus on the following six areas for improvement in the coming five years. The overall planning is done with these areas identified as the core areas for development.

Gaps Identified / Focus Areas

1. Infrastructure development

2. Modern Teaching-Learning-Evaluation system

3. Focus on placements and entrepreneurships

4. Interdisciplinary studies and research

5. Co-curricular activities, extra-curricular activities and social activities

6. Inclusive education for all and focus on overall development of students

SWOC ANALYSIS

With focus on fulfilling expectations of stake holders in the light of current scenario, SWOC analysis of the college is conducted. SWOC analysis enables us to develop a basic framework of the overall strategic plan. Moreover, steps for implementation can also be determined with complete knowledge about college strengths, weakness, opportunities and challenges.

STRENGTHS

- Supportive and committed Management
- Access to all facilities being in a metropolitan city of Mumbai
- Brand Name and most preferred institution in the city
- Visibility at international level
- College with NIRF ranking
- Academic and administrative flexibility being an autonomous institute
- Talented students
- Infrastructure
- Faculty and staff members
- High retention of employees
- Internships & placements
- Opportunity for participation in curricular, co-curricular and extra-curricular activities

WEAKNESSES

- Faculty member with industry exposure
- Alumni engagements
- Research and consultancy activities
- Industry-Institute interaction
- Limited automation

SWOC

OPPORTUNITIES

- Access to benchmark institutes such as IIT and industries for guidance and collaboration
- Scope for certification and degree programmes
- Strengthening collaboration with industry for research, consultancy, training & internships
- Global initiatives and engagements through foreign university tie-ups
- Enhanced community and social and societal engagement with focus on inclusive education

CHALLENGES

- Increasing number of autonomous colleges and private universities
- Lesser inclination of students towards technical education leading to fewer admissions
- Understanding and engaging the millennial student
- Multiple compliance requirements affecting teaching & research
- Pace of technology change leading to quick outdation of curriculum
- Effect of global recession hampering industry's capability to offer placements leading to scarcity of jobs for engineering graduates

GOALS

After thorough analysis of SWOC and with due consideration to college vision, mission, core values and external factors, KJSCE has identified the following goals and priorities. The term "Long Term Goal" has been used for those targets that the college plans to execute / initiate in the coming five years. The issues listed under immediate priorities would require immediate attention and may require continuous or frequent action.

Long Term Goals

L.1 Promote leadership development

L.2 Develop college name as a brand and improve college ranking

L.3 Develop college infrastructure

L.4 Enhance alumni engagement and interaction

L.5 Extend community services

L.6 Escalate efforts for global / national recognition collaborations

L.7 Boost Industry- Institute relationships

L.8 Improve quality assurance systems

Immediate Priorities

I.1 Adapt modern Teaching, Learning and Evaluation tools

I.2 Focus on placement, entrepreneurship, internships and career development activities

I.3 Augment research, development and innovation activities with college curriculum

I.4 Increase extra-curricular and co-curricular activities

I.5 Attract talented students and ensure their overall development

STRATEGIC ACTION PLAN

A detailed strategic plan of KJSCE is presented in this section with various factors listed for each goal and the required actions pertaining to each factor. Firstly eight long term goals and their corresponding actions are presented followed by the immediate priorities.

LONG TERM GOALS

L.1 Leadership development		
Sr. No.	**Factors**	**Actions**
1	Vision, Mission and Institution Goals	• Articulate college vision and refine college mission for their effective implementation • Set short term and long term goals for every individual, department and section
2	Transparency & Leadership	• Define of exact role and responsibility as an (i) individual (ii) post / position (iii) part of certain committee • Give wide publicity of procedures regarding polices formulation, approval and implementation • Improve grievance redressal mechanism and faster dissemination of decisions • Promote leadership development through decentralization of college / department work • Implement E-Governance through MIS- Data analysis system
3	Internal Quality Assurance Cell	• Set well-defined guidelines for all the processes in the college / department • Conduct regular audits for every system in the college • Ensure system checks / spot checks and suggesting remedial measures to ensure a transparent and trust worthy system
4	Students Participation	• Nominate of student representatives on various bodies for developing an inclusive system • Seek students suggestion / opinions in college matters as far as possible

L.2 College name as a brand and improve college ranking		
Sr. No.	**Factors**	**Actions**
1	University and college development plan for achieving	• Prepare a plan for achieving vision of the University • Prepare a plan for college development, identify resources and get approval of budget for the same • Form Board of Studies and appointment of authorities at various positions as per the University guidelines

	University vision	• Prepare for pre-assessment & assessment so that the college system is in accordance with the University (SVU) rules
2	Accreditation & Certifications	• Identifying the Unique Selling Points of KJSCE and publicize them • Highlight success stories of students eventually leading to brand building • Prepare for accreditations by national and international agencies • Achieve higher college rankings given by reputed assessors • Plan and prepare for various statutory inspections, facilitation of inspections and implementing remedial measures

L.3 College infrastructure		
Sr. No.	**Factors**	**Actions**
1	Classroom Infrastructure	• Develop of smart class rooms with facilities such as multimedia, support equipment and E-Learning facilities
2	Laboratory Infrastructure	• Establish advances laboratories and Centres of Excellence with state-of-the-art equipment • Procure of industry grade equipment (centres of competence) for laboratory work, research and consultancy • Provide simulators, licensed software and use of virtual laboratories
3	Library and learning resources	• Sensitize stake holders towards inclusive education • Make available latest books, journals, periodicals, magazines from wide variety of streams (technical and non-technical) • Develop E-resources and provide online access to E-media, anytime and anywhere • Enrich learning resources and knowledge areas
4	Sports, Hostel & Canteen	• Enhance facilities related to sports (indoor/outdoor) facilities • Form hobby clubs, larger canteen & community centres • Create additional hostels facility for boys & girls within the campus • Create residential facility for faculty and staff members

L.4 Alumni engagement and interaction		
Sr. No.	**Factors**	**Actions**
1	Interaction and engagement	• Seek opinion from alumni for framing curriculum and college policies • Invite alumni for delivery of guest lectures and conduction of certain course • Exploring the possibility for tie-ups in the form of expert guest lectures, collaboration for research, consultancy, etc.
2	Effective communication and reach out	• Use social media such as LinkedIn, Twitter, Instagram to be in regular touch with alumni • Develop mechanism for providing information to the alumni about

		• major college activities and sending invite for the same • Develop and create content worth sharing with alumni such as college activities, festivals, new initiatives, etc. College website can be modified to have all such information at a place
3	Data Collection, Record Keeping	• Effective mechanism can be developed for keeping a record of all alumni. This record and analysis to be made available to alumni as well, so that they can get connected with their peers • Highlighting the achievements of alumni and their talents

L.5 Community services		
Sr. No.	**Factors**	**Actions**
1	Vocational Training and Support	• Identify the job oriented courses as per local / state needs • Provide vocational training at the college
2	Eco system for Societal Commitment	• Increase activities conducted by KJSCE outreach centre • Identify the societal issues and providing technical solutions to the same • Explore & provide support to the execution of projects that are important from societal perspective • Extend educational support to needy students • Enhance facilities and developing an inclusive education system for differently abled students. • Develop harmonized guidelines for barrier free accessibility • Conduct more activities under college social wing, Parvaah
3	Health and Hygiene Support	• Conduct health awareness camps and related activities

L.6 Global / national collaborations		
Sr. No.	**Factors**	**Actions**
1	Attracting Foreign and out of State Students	• Attract foreign students particularly from developing countries by offering programs of their interest • Offer twinning programmes with foreign students
2	Exchange programmes for students and faculty	• Identify specific higher level learning institutions abroad for student exchange programmes • Sign MoUs with potential partner institutions for exchange programmes, collaborative research and use of resources • Sign MoUs with government for education, projects and availing incentives with focus on areas of national and state interest • Sign MoUs with foreign Universities for higher education keeping focus on foreign scholarships and preference in admission for KJSCE students

L.7 Industry- Institute relationships		
Sr. No.	**Factors**	**Actions**
1	Leverage Industry Resources	• Invite industry experts for guest lecturers / talks / seminars / workshops • Identify programme wise preferred industries & companies for collaboration in the form of research, consultancy, internships, projects, etc. • Establish Centres of Excellence with potential industries • Enhance partnership with industry for syllabus reviews/advisory roles and visiting faculty for specific courses • Depute faculty members to Industry on sabbatical and internships • Make available students for industry projects as interns and for research projects converted into students projects
3	Leverage Institutional Resources for Industry	• Conduct training programmes and talks by faculty members on niche areas considering faculty expertise • Extend consultancy and testing facility • Offer qualification / skill / knowledge upgradation programs (full time / part time) to industry personnel in areas of their interest

L.8 Quality assurance systems		
Sr. No.	**Factors**	**Actions**
1	Establishing Quality Systems	• Ensure good governance which would be a brand for the college • Ensure that the processes and systems are as per the college quality policy and maintain the pre-defined benchmarks • Publish Quality Assurance handbook and disseminate quality assurance policies to all stake holders • Educate and train of all employees for quality assurance • Establish audit process & audit teams for every system and process • Train internal auditor teams • Conduct regular audits and suggesting remedial measures • Obtain certifications for college systems from recognized certifying agencies
2	Continual Improvement, Rewards and Recognitions	• Identify achievements and best practices for every department and section • Organize quality circle competitions rewarding / appreciating the faculty and staff members for their contribution towards quality assurance

The details of the immediate priorities identified and the corresponding actions required are listed below.

I.1   Modern Teaching, Learning and Evaluation tools

Sr. No.	Factors	Actions
1	**Curriculum Design**	• Design and update curriculum as per all graduate attributes and expectations of stake holders • Develop a learner centric education system by providing scope for long duration internships, credit transfers, credits for online courses, industry projects, etc. • Benchmark curriculum with industry requirements and reputed institutions • Promote research culture in the college through lifelong learning • Develop e-content and e-repository for students • Develop and using modern pedagogy tools
2	**Assessment and Feedback**	• Promote and using online learning, evaluation and assessment tools, etc. • Use appropriate assessment and differentiated tools for students • Use ICT for obtaining 360 deg. feedback of the students
2	**Training Faculty and Staff Members**	• Perform training need analysis periodically • Conduct training programs and depute faculty and staff for competence development • Encourage faculty and staff members to undergo internships in industries
3	**Bench Marking with Premier Institutes**	• Constitute academic teams and visiting premier institutions for gathering firsthand experience about their processes • Adapt and implementing best practices

I.2   Placement, entrepreneurship, internships and career development activities

Sr. No.	Factors	Actions
1	Placement, Internships and Career guidance	• Develop dedicated teams for increasing internships and placements of students leading to improvement in industry relations • Target specific core companies for placements and develop long term relations with them in the form of internships, projects and consultancy • Prepare database of various potential industries/companies and sign MoUs with them • Conduct value added programmes for enhancing soft skills and domain expertise of students
2	Entrepreneurship	• Provide formal training to students on entrepreneurship • Identify emerging areas of entrepreneurship and provide seed funding for same • Identify interested students for entrepreneurship and mentor them by providing help from successful entrepreneurs, alumni/others

I.3 Research, development and innovation activities with college curriculum

Sr. No.	Factors	Actions
1	R&D Infrastructure	• Enhance facilities in all departments by modernization and removal of obsolescence in laboratories • Develop competency in technical staff for R&D laboratories with appropriate training
2	Establishing Centres of Competence and Collaborating with Premier Institutes	• Raise funds through project proposals • Apply for TEQIP/Government/ other funding • Promote consultancy activities • Collaborate and work with institutions / organizations such as IISC, IITs, TIFR, ISRO, DRDO, etc. • Promote multi / inter disciplinary research and product development • Promote faculty members to publish research papers / articles in reputed journals / conferences
3	Intellectual Property Rights	• Encourage "idea to product" activities by students and faculty members • File patents and scaling up such activities

I.4 Extra-curricular and co-curricular activities

Sr. No.	Factors	Actions
1	Activities Promotion, Rewards and Recognition	• Form hobby clubs for nurturing interests • Promote student's participation in national / international level tournaments/competitions and hosting such competitions • Give admission priority for state/national achievers • Reward and recognize achievers and award winners • Address social issues and create awareness

I.5 Attract talented students and ensure their overall development

Sr. No.	Factors	Actions
1	Talent Attraction Policy	• Frame guidelines for identifying the talented students based on academics and other activities • Encourage talented students in the form of scholarships, prizes, awards, etc.
2	Conducive Academic Environment	• Provide best facilities and infrastructure to the students • Extend access to library and infrastructural facilities 24X7 hours • Strengthen the proctorial system • Develop an inclusive educational system with special focus on economically backward students, students with disability, students' with diverse background, culture, etc.
3	Career Growth & Development	• Mentor students for choosing their career options and professional development • Arrange seminars / expert talks by career counselors , eminent personals

		• Sponsor students for reputed conferences, competitions and highlighting their achievements on college website • Provide assistance to the students to pursue higher studies abroad in the form of handholding and providing them alumni contacts • Recommend students to industries for specific role or institute abroad for further studies

STRATEGY IMPLEMENTATION AND MONITORING

Strategy after being implemented, the progress shall be monitored and measured from time to time through the IQAC. The concept of SMART (Specific, Measurable, Attainable, Realistic and Time bound) would be used for ensuring the success of proposed implementation plans.

Sr. No.	Activities	Monitoring body	Target date of Completion	Measurable
		LONG TERM GOALS		
1	Promote leadership development	Principal Vice-Principals Head of the Departments		Governing Body selection, regular appointments, good governance initiatives, Vision-Mission reviews, number of meetings conducted, decisions made, polices implementation, etc.
2	Develop college name as a brand and improve college ranking	Principal, Vice-Principals, Head of the Departments		Ranking by various agencies and feedback of stake holders, etc.
3	Develop college infrastructure quality assurance systems	Dean Infrastructure and Resource management, Registrar		Budget allocation and utilization, new facilities added, removal of obsolescence, equipment added, etc.
4	Enhance alumni engagement and interaction	Alumni Cell		Number of alumni data base entries, number of interactions, support for internships, guest lectures, placements, projects, consultancy, etc.
5	Extend community services	Dean Student Affairs	June 2024	Number of vocational trainings provided, social projects undertaken and its impact, number of skill development programs undertaken for marginal section of the society and its impact, access audit, etc.
6	Escalate efforts for global / national recognition collaborations	Dean Academics and Dean Student Affairs		Number of MoUs signed with other organizations / institutions, number of students under student exchange program, number of projects / research undertaken with other institutions, number of students going abroad for further studies

				/ jobs, etc.
7	Boost Industry- Institute relationships	Placement Officer, Industry Academia Interface Incharge		Number of companies visiting the campus, number of offers made through placements, average salary offered, internships offered, number of MoUs signed with industries, industry persons on various advisory bodies, number of industry persons pursuing higher studies in KJSCE, etc.
8	Improve quality assurance systems	IQAC		New initiatives taken, amount of time in completing any process, quality of the outcome of any process, etc.
IMMEDIATE PRORITIES				
1	Teaching, Learning and Evaluation methodology	Autonomous Syllabus Coordinator, Controller of Examinations	Continuous process	Curriculum review & design, attainment of course outcomes, program outcomes & graduate attributes, industry partnerships, faculty training on new areas, introduction of new courses, new courses/ electives offered in emerging areas, new pedagogical tools used for teaching / learning / assessment, etc.
2	Placement, Entrepreneurship, Internships & Career development	Placement Officer, Industry Academia Interface Incharge	June 2022	Number of companies visiting the campus, number of offers made through placements, average salary offered, internships offered, number of graduates pursuing higher education, number of students becoming eligible for higher education through GRE / GATE / CAT / GMAT...etc, number of students securing jobs in public sector and other Government jobs, percentage of graduates becoming entrepreneurs
3	Research, development and Innovation	Dean R&D	June 2022	Publications in national/international journals and conference proceedings, number of patents filed, new MoUs signed with academic and industrial organizations, number of centres of excellence established, etc.
4	Extra-curricular and co-curricular activities	Dean Student Affairs	June 2022	Number of student participants in various activities, number of

				tournaments won, number of sports, technical and techno-cultural events organized, number of regional, national and international recognitions received, number of competitions participated
5	Attract talented students and ensure their overall development	Dean Academics, Controller of Examinations	June 2021	CET scores, students profile, pass percentage, number of distinctions and first classes, graduate attribute attainment with levels, alumni feedback, etc.

Each goal and priority would be assessed periodically and necessary corrective actions would be undertaken as and when required. Our prime goal is to implement the strategic plan effectively and efficiently so that we meet the desired outcomes.

DESIRED OUTCOMES

After effective implementation of the strategic plan, we envisage to meet the expectations of the stakeholders and make a significant progress in achieving the vision of the college.

K. J. Somaiya College of Engineering strives to emerge as

- ✓ A World Class Centre of Learning in the field of Engineering Sciences which promotes active learning, collaborative learning and interdisciplinary learning.
- ✓ An outstanding research and incubation centre.
- ✓ A College providing an enabling environment for attaining excellence through collaboration with industry and benchmarking with the best amongst peer institutions.
- ✓ A College creating graduates those go beyond traditional boundaries to solve problems using creative means.
- ✓ A College creating graduates with human values committed to progress of the societal and national development.
- ✓ A College creating graduates that are an asset for any organization / industry.

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