

2019-2024

Operational Plan for Engineering Departments



College of Engineering

كلية الهندسة

KKU

College of Engineering, King Khalid University

College Quality Committee

Operational Plan for College of Engineering (2019-2024)

Purpose

The College of Engineering (COE) at King Khalid University is emerging as one of the top Engineering Colleges of Kingdom of Saudi Arabia. The College is committed to contribute significantly in achieving the vision and the mission of the King Khalid University and the Saudi vision 2030. Since its inception, COE has been evolving as a hub of knowledge to the community. It has ambitious leadership, state of the art facilities, and highly qualified faculty from different parts of the globe, making it a diversified platform for the sharing and transfer of knowledge. All the eligible engineering programs are accredited by ABET, and two programs are accredited by NCAAA. The strategic planning is important for COE where its role is two-fold; leadership in creating technological advances and education of students who will have a significant positive impact to respond to the societal needs. The strategic plan is implemented by an effective and comprehensive operation plan. This document presents the operational plan to achieve the strategic objectives. All academic departments are expected to implement the operational plan and determine the progress towards the strategic plan at the end of an academic year.

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Vision

To be a pioneer in engineering education, innovative research and sustainable development of the community.

Mission

To achieve academic excellence by providing adequate teaching-learning resources, motivating scientific research, and bring forth qualified engineers to serve the community.

Values

Honesty: We adhere to the Islamic values and ethical principles, and we seek to complete our mission in the best manner.

Commitment: We abide by business rules and regulations, and shoulder the responsibility for the University and our country.

Respect: We adhere to mutual respect, accept the other opinion, welcome criticism and appreciate others' efforts.

Excellence: We abide by the excellence criteria at the local and international levels in the academic and administrative practices.

Innovation: We fully support innovative ideas and activities, which tackle community challenges and issues.

Transparency: The University is committed to clearly deal with all officials and beneficiaries, in the manner that achieves justice, and boosts trust, credibility and the institutional accountability.

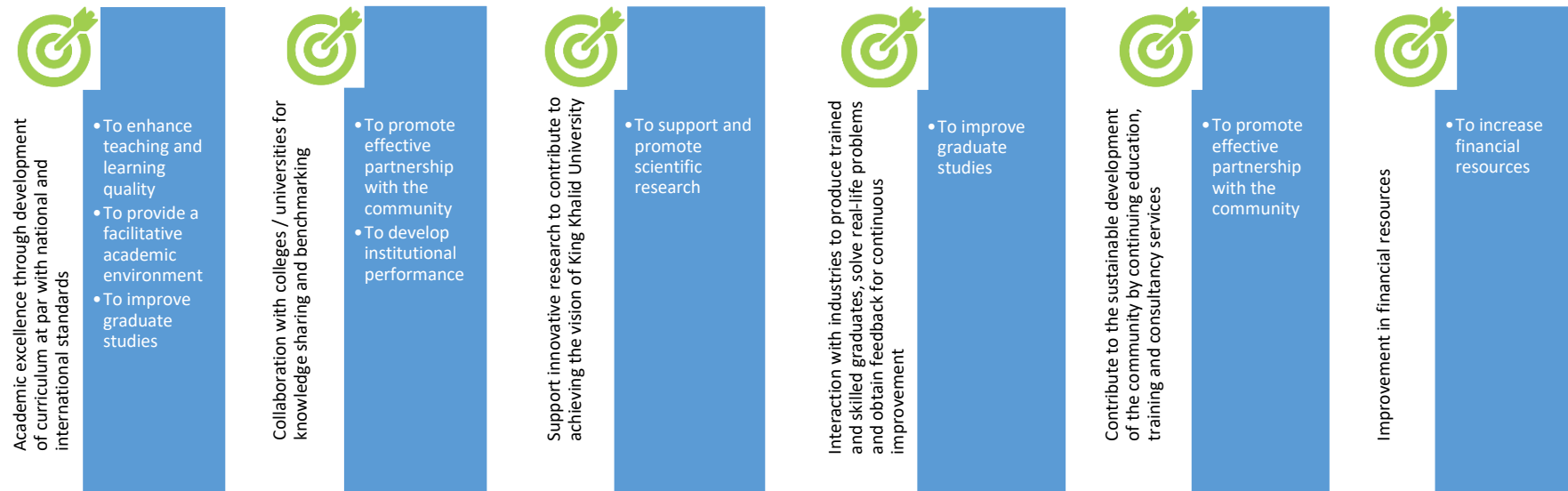
Strategic Themes



Strategic Goals

1. Academic excellence through development of curriculum at par with national and international standards.
2. Collaboration with colleges / universities for knowledge sharing and benchmarking.
3. Support innovative research to contribute to achieving the vision of King Khalid University.
4. Interaction with industries to produce trained and skilled graduates, solve real-life problems and obtain feedback for continuous improvement.
5. Contribute to the sustainable development of the community by continuing education, training and consultancy services.
6. Improvement in financial resources.

Mapping of the Strategic Goals of College of Engineering to the Strategic Goals of King Khalid University



Description of Strategic Goal No. 1, Key Performance Indicators, and Initiatives

Strategic Goal No. 1	Academic excellence through development of curriculum at par with national and international standards	Responsibility for Implementation	College Council
Description of Goals	<p>This strategic goal is related to progress towards academic excellence by providing adequate teaching-learning resources and conducive academic environment. The primary focus is to enhance quality of the academic system. It will include careful development of the curriculum at par with the standards of top national and international universities, providing tracks within the UG and PG program by offering a range of elective subjects and aligning with community needs and industry requirements. The feedback of the stakeholders and independent reviewers should be taken to improve the curriculum. The student learning outcomes defined by NQF and international organizations like ABET should be incorporated in the curriculum with well-defined process to measure, evaluate and improve. This goal will include meeting the academic criterion of national and international organizations and getting accreditation. To achieve this goal, it is important to recruit outstanding faculty and staff, maintain high faculty to student ratio, motivating the faculty and students for professional development. The introduction of post graduate programs is one of the major objectives to be achieved to meet this goal. Ample resources are required to be provided for PG programs. In addition, vocational and soft skill development programs is also utmost important objective.</p>		
Expected Risks	<ul style="list-style-type: none"> ➤ Inadequate financial resources ➤ Large number of faculty members may leave simultaneously ➤ Non-availability of specialized senior faculty for postgraduate programs ➤ Poor response of students in self-financing (tuition fee paid by students) programs 		
Risk Management Plan	<ul style="list-style-type: none"> ✓ Proposal and persuasion for additional financial support from the University ✓ Replacement or upgradation of obsolete equipment ✓ Proper advertisement and information circulation for recruitment of senior faculty members at the levels of Associate Professor and Professor ✓ Development of state-of-art facilities for postgraduate programs at par with the best national and international universities and motivating the students to register ✓ Prepare a faculty database for quick recruitment process 		

Key Performance Indicators (Strategic Goal No. 1)

KPI#	Key Performance Indicators	Measurement Level	Benchmark	Target	Measurement Method / Frequency	Responsibility of the Measurement	Responsibility of the Review
1.1	Students overall evaluation on the quality of their learning experiences, services offered at the institution (Reference: NCAAA KPI-I-03, KPI-I-10, KPI-P-03, KPI-P-11)	College & Program			University experience survey / Annual	Program Quality Coordinators	Head of Development and Quality Unit
1.2	Proportion of courses in which student evaluations were conducted during the year	Program			Data Analysis / Annual		
1.3	Proportion of programs in which there was independent verification (within the institution) of standards of student achievement during the year	Program			Data Analysis / Annual		
1.4	Proportion of programs in which there was independent verification of standards of student achievement by people external to the institution during the year	Program			Data Analysis / Annual		
1.5	Students overall rating on the quality of their courses (Course evaluation survey) (Reference: NCAAA KPI-P-04)	Program			Survey / Annual		
1.6	Percentage of students entering programs who successfully complete first year (Reference: NCAAA KPI-I-04)	College			Data Analysis / Annual		
1.7	Proportion of students entering undergraduate programs who complete those programs in minimum time (Reference: NCAAA KPI-I-06, KPI-P-05)	College & Program			Data Analysis / Annual		
1.8	Enrolment in post graduate programs who complete those programs in specified time	Program			Data Analysis / Annual		
1.9	Stakeholder evaluation of library services (Reference: NCAAA KPI-I-07, KPI-P-18)	College & Program			Survey / Annual		

1.10	Proportion of Accredited programs to total number of programs (Reference: NCAAA KPI-I-02)	College			Data Analysis / Annual		
1.11	Average overall rating of adequacy of facilities and equipment in a survey of teaching staff	Program			Survey / Annual		
1.12	Ratio of students to full time or equivalent teaching staff (Reference: NCAAA KPI-I-11, KPI-P-12)	College & Program			Data Analysis / Annual	Head of Statistical Unit	Vice Dean for Development and Quality
1.13	Proportion of teaching staff with verified doctoral qualifications (Reference: NCAAA KPI-I-12)	College			Data Analysis / Annual		
1.14	Ratio of students to administrative staff	College			Data Analysis / Annual		
1.15	Number of book titles held in the library as a proportion of the number of students	College			Data Analysis / Annual		
1.16	Number of web site subscriptions as a proportion of the number of programs offered	College			Data Analysis / Annual		
1.17	Number of periodical subscriptions as a proportion of the number of programs offered	College			Data Analysis / Annual		
1.18	Proportion of teaching staff leaving the institution in the past year for reasons other than age retirement (Reference: NCAAA KPI-I-13, KPI-P-14)	College & Program			Data Analysis / Annual		
1.19	Proportion of teaching staff leaving the institution in the past year including retirement (Reference: NCAAA KPI-I-13, KPI-P-14)	College & Program			Data Analysis / Annual		
1.20	Proportion of students with nationality other than Saudi Arabia	College			Data Analysis / Annual		
1.21	Proportion of professors and associate professors to total number of faculty (Reference: NCAAA KPI-P-13)	Program			Data Analysis / Annual		
1.22	Number of accessible computer terminals per student (Reference: NCAAA KPI-I-07, KPI-P-18)	College & Program			Data Analysis / Annual	Head of Computer Labs	
1.23	Stakeholder evaluation of websites, web-based electronic data management system or electronic resources	College & Program			Survey / Annual	Coordinator College website	

	(Reference: NCAAA KPI-I-01, KPI-I-15, KPI-P-1.23)						
1.24	Proportion of students qualified in national specialization tests Reference: NCAAA KPI-P-07)	Program			Data Analysis / Annual	Head of Assessment & Evaluation Unit	
1.25	Proportion of students registered in Saudi council of engineers	College			Data Analysis / Annual		
1.26	Proportion of graduates from undergraduate programs who within six months of graduation are: (a) employed (b) enrolled in further study (c) not seeking employment or further study (Reference: NCAAA KPI-I-05, KPI-P-08)	College & Program			Survey / Annual	Head of Alumni and Training Unit	Vice Dean for Academic Affairs
1.27	Student evaluation of academic and career counselling through advisory survey (Reference: NCAAA KPI-I-10)	College			Survey / Annual	Head of Student Affairs and Academic Advising Unit	
1.28	Stakeholder evaluation of e-learning services (Reference: NCAAA KPI-I-07, KPI-P-18)	College & Program			Survey / Annual	Head of e-learning Unit	
1.29	Percentage of achieved indicators of the institutional strategic plan goals (Reference: NCAAA KPI-I-01, KPI-P-01)	College & Program			Data Analysis / Annual	Head of Development & Quality Unit	Vice Dean for Development and Quality
1.30	First-year students retention rate	College			Data Analysis / Annual	Head of Development & Quality Unit	Vice Dean for Development and Quality
1.31	Average number of students in the class	Program			Data Analysis / Annual	Registration Unit	Vice Dean for Academic Affairs

Initiatives and Implementation (Strategic Goal No. 1)

S.No.	Initiative	Beginning Date	Finishing Date	Responsibility
1-1	Motivating teaching staff			Dean of College of Engineering
1-2	Improving the quality of learning sources			
1-3	Developing the adequate teaching-learning environment			
1-4	Establishment of Fabrication Lab (Fablab)			
1-5	Supporting the students with special needs			Vice Dean for Academic Affairs
1-6	Orientation Program for newly admitted students			
1-7	Monitoring and ensuring quality of teaching-learning			Chairman of the Program
1-8	Development and updating the curriculum			
1-9	Improving the student-admission standards			
1-10	Decide number of seats for admissions in undergraduate and post graduate programs			
1-11	Improving the students' academic performance			
1-12	Establishing competitive post-graduate programs			
1-13	Arranging external independent review towards progress of the program			
1-14	National and International accreditation of the academic programs			Head of Quality Unit
1-15	Recruiting and retaining outstanding faculty members			Head of Recruitment Unit
1-16	Creating a database of CVs for quick recruitment			
1-17	Expansion in e-learning			Head of E-learning Unit
1-18	Assessing the program learning outcomes			Program quality coordinators
1-19	Assessing the Program Educational Objectives			
1-20	Arranging internal independent review towards progress of the program			
1-21	Fostering the fields of academic collaboration			

Description of Strategic Goal No. 2, Key Performance Indicators, and Initiatives

Strategic Goal No. 2	Collaboration with other colleges/universities for knowledge sharing and benchmarking	Responsibility for Implementation:	College Council
Description of Goals	<p>Collaborative benchmarking with other peer colleges / universities is one of the best ways to measure, evaluate and demonstrate the performance that can be subsequently used for continuous improvement by identifying opportunities. New strategic organizational development plans can be made by comparing good practices and processes of other esteemed universities through data support decision making. Collaboration and benchmarking process can help in adopting processes to grow the performance and achieve the desired level of satisfaction in the areas of teaching-learning, administrative support and facility, research and community services.</p>		
Expected Risks	<ul style="list-style-type: none"> ➤ Inadequate financial resources ➤ Poor responses from the identified peer universities 		
Risk Management Plan	<ul style="list-style-type: none"> ✓ Proposal and persuasion for additional financial support from the University ✓ Dedicated teaching or non-teaching staff members for the assigned tasks 		

Key Performance Indicators (Strategic Goal No. 2)

KPI#	Key Performance Indicators	Measurement Level	Benchmark	Target	Measurement Method / Frequency	Responsibility of the Measurement	Responsibility of the Review
2.1	Number of memorandums of understanding (MOUs) signed with other colleges/ universities for sharing of benchmarks and teaching-learning resources	College			Data Analysis	Head of Statistical Unit	Vice Dean for Development and Quality
2.2	Number of events arranged in College of Engineering-King Khalid University (COE-KKU) with participation of representatives from other colleges/universities	Program/ College			Data Analysis		
2.3	Proportion of students of other colleges/ universities who take courses in COE-KKU	College			Data Analysis	Registrar	Vice Dean for Academic Affairs
2.4	Proportion of students of COE-KKU who take courses in other colleges/universities	College					
2.5	Number of conferences, seminars and training programs jointly organized in collaboration with other colleges/universities	Program/ College			Data Analysis	Director of Research Center	
2.6	Number of joint research projects in collaboration with other colleges/universities	Program/ College			Data Analysis		
2.7	Number of research or consultancy projects in COE-KKU in which faculty from other colleges/universities are involved	Program/ College			Data Analysis		

2.8	Number of assignments, independent reviews done by faculty of COE-KKU for other colleges/universities	Program			Data Analysis	Program Quality Coordinators	Head of Development and Quality Unit
2.9	Number of assignments, independent reviews done by faculty of other colleges/universities for COE-KKU	Program			Data Analysis		
2.10	Number of events in which students or faculty of COE-KKU have participated in other colleges/universities	Program/ College			Data Analysis		Chairman of the Program

Initiatives and Implementation (Strategic Goal No. 2)

S.No.	Initiative	Beginning Date	Finishing Date	Responsibility
2-1	Fostering the fields of academic collaboration and resource sharing with other colleges/universities			Dean of College of Engineering
2-2	Signing MOUs with other colleges/universities to share the actual benchmarks and performance indicators			
2-3	Organizing events in COE-KKU and inviting delegates from other colleges/universities			Event Coordinators
2-4	Organizing conferences, seminars and training programs in collaboration with other colleges/universities			
2-5	Encouraging students and faculty to participate in the events arranged by other colleges/universities, outside KKU			Chairman of the Program
2-6	Encouraging faculty to participate in research and consultancy projects with other colleges/universities			
2-7	Involving faculty from other colleges/universities in funded research projects			Principal Investigator of the Projects
2-8	Inviting external independent reviews for the self-study reports / annual program reports, curriculum and other quality documents			Program Quality Coordinators
2-9	Assessing the Program Learning Outcomes			
2-10	Assessing the Program Educational Objectives			

Description of Strategic Goal No. 3, Key Performance Indicators, and Initiatives

Strategic Goal No. 3	Support innovative research to contribute in achieving the vision of the King Khalid University	Responsibility for Implementation:	Research Center
Description of Goals	This strategic goal deals with developing and supporting innovative research by creating research chairs, centers of excellence, research groups and laboratories as per the international standards to contribute in achieving the vision of the KKU. This goal also aims at improving the quality of research by encouraging researchers and attracting new research pioneers and providing adequate research environment including well-equipped laboratories, interdisciplinary and multidisciplinary teams, funds and awards. Additionally, this goal is concerned with initiating cooperation with universities and industry, supporting postgraduate studies and embracing innovative ideas.		
Expected Risks	<ul style="list-style-type: none"> ➤ Insufficiency of financial resources for labs ➤ Rejection of research project fund applications ➤ Low number of ISI publications ➤ Failure to attract research pioneers ➤ Poor retention of faculty ➤ Excessive teaching and administrative work load 		
Risk Management Plan	<ul style="list-style-type: none"> ✓ Proposal and persuasion for additional financial support from the University ✓ Apply for external funding from companies ✓ Benefit from inscription in postgraduate studies, training and consultancy fees to support research ✓ Propose attractive salaries for research pioneers ✓ Prepare a database with different CVs of faculty and apply express (fast) recruitment procedure ✓ Payment for extra hours for faculty ✓ Incentives and remuneration for initiatives, administrative and research contributions 		

Key Performance Indicators (Strategic Goal No. 3)

KPI#	Key Performance Indicators	Measurement Level	Benchmark	Target	Measurement Method / Frequency	Responsibility of the Measurement	Responsibility of the Review
3.1	Ratio of the budget allocated for the scholarly research to the college overall budget (Reference: KKU strategic plan Goal 4 KPI 4.1)	College			Data Analysis / Annual	Director of Research Center	Dean of College of Engineering
3.2	Research income from external sources in the past year as a proportion of the number of full time teaching staff members	College					
3.3	Proportion of the total, annual operational budget dedicated to research (Ratio of the budget allocated for the scholarly research of the college to the research budget of the university)	College					
3.4	Funds for research chairs, centers of excellence and research groups as percentage of the college budget (Reference: COE old strategic plan KPI 2.2)	College					
3.5	Total fund from government sources and/or from private sources dedicated to nurture talent and innovation (Reference: COE old strategic plan KPI 2.9)	College					
3.6	Number of research chairs, centers of excellence and research groups (Reference: COE old strategic plan KPI 2.1)	College College					
3.7	Number of national and international collaborative research projects. (Reference: COE old strategic plan KPI 2.6)	College					
3.8	Number of multi-disciplinary projects with other departments, industry, government and the community (Reference: COE old strategic plan KPI 2.5)	College					
3.9	Proportion of rejected research proposals for funding to the total applications submitted	College					

3.10	Number of faculty awards for innovative ideas, remarkable activities and teaching excellence (Reference: COE old strategic plan KPI 2.17, NCAAA KPI-I-19)	College							
3.11	Number of refereed publications in the previous year per full time equivalent member of teaching staff (Publications based on the formula in the Higher Council Bylaw excluding conference presentations) (Reference: NCAAA KPI-I-17, KPI-P-16)	College & Program						Vice Dean for Development and Quality	
3.12	Ratio of the number of the scientific articles published in ISI journal to the number of the overall articles published annually (Reference: KKU Strategic Goal 4 KPI 4.2)	College							
3.13	Number of patents applications filed (Reference: NCAAA KPI-I-19)	College							
3.14	Number of patents accepted (Reference: old strategic plan KPI 2.4, NCAAA KPI-I-19)	College							
3.15	Number of citations in refereed journals in the previous year per full time equivalent teaching staff (Reference: NCAAA KPI-I-18, KPI-P-17)	College & Program							
3.16	Proportion of full time member of teaching staff with at least one refereed publication during the previous year (Reference: NCAAA KPI-I-16, KPI-P-15)	College & Program							
3.17	Number of papers or reports presented at academic conferences during the past year per full time equivalent members of teaching staff.	College							
3.18 / 1.8	Proportion of students entering post graduate programs who complete those programs in specified time (Reference: same as KPI 1.8)	Program							Head of Statistical Unit
3.19 / 1.13	Proportion of teaching staff with verified doctoral qualifications (Reference: same as KPI 1.13, NCAAA KPI-I-12)	College							

3.20	Proportion of faculty active in research (with at least four publications in ISI journals) to the total faculty	College					
3.21 / 1.18	Proportion of teaching staff leaving the institution in the past year for reasons other than age retirement (Reference: same as KPI 1.18, NCAAA KPI-I-13, KPI-P-14)	College & Program					
3.22 / 1.20	Proportion of professors and associate professors to total number of faculty (Reference: same as KPI 1.20)	College					
3.23	Number of post graduate students who successfully completed the program	College					
3.24	Percentage of retired faculty members to total faculty	College					
3.25	Percentage of faculty who are involved in administrative work (Reference: old strategic plan KPI 2.21)	College College					
3.26	Average overall rating of adequacy of facilities and equipment for research activities in a survey of teaching staff (Reference: same as KPI 1.11)	Program				Program quality coordinators	Head of Development and Quality
3.27	Number of faculty serving on editorial boards of international ISI journals (Reference: old strategic plan KPI 2.12)	College & Program				Chairman of the Program	Director of Research Center
3.28	Number of faculty who served as editors or sessions' chairs in national and international conferences (Reference: old strategic plan KPI 2.13)	College & Program					
3.29	Number of faculty invited for key note speakers or plenary lectures at national and international conferences (Reference: old strategic plan KPI 2.14)	College					
3.30	Number of research labs	College				Head of Laboratories and Workshops	

Initiatives and Implementation (Strategic Goal No. 3)

S.No.	Initiative	Beginning Date	Finishing Date	Responsibility
3-01	To create research chairs, centers of excellence, research groups and laboratories as per the international standards			Director of Research Center
3-02	To reward researchers who are active in research			
3-03	To initiate a scientific journal of College of Engineering			
3-04	To initiate research cooperation with industry			
3-05	To encourage interdisciplinary and multidisciplinary research groups			
3-06	To encourage research projects solving real life problems related to the province of Asir and contribute to the sustainable development			
3-07	To Provide adequate environment of research			
3-08	To embrace innovative ideas			Head of Talent & Innovation Unit
3-09	To define good selection criteria for admissions in post graduate programs			Registrar
3-10	To involve the best undergraduate students in research activities			Chairman of the Program
3-11	Establishing competitive and innovative post-graduate programs			
3-12	Recruiting research pioneers and retaining outstanding faculty members			
3-13	To reduce the teaching load of faculty members who are active in research			
3-14	To collect and analyze the data related to research continuously and close the quality loop			Head of Recruitment Unit

Description of Strategic Goal No. 4, Key Performance Indicators, and Initiatives

Strategic Goal No. 4	Interaction with industries to produce trained and skilled graduates, solve real-life problems and obtain feedback for continuous improvement	Responsibility for Implementation	Alumni and Training Unit
Description of Goals	<p>This strategic goal is related to produce trained and skilled graduates to improve graduate employability to design authentic assessment activities, aligned with industry practices, standards and approaches. The primary focus is to fill the gaps between the perspectives of students, graduates, employers and higher education personnel to approach the overall higher education experience for heightened employability. The student learning outcomes defined by NQF and ABET explicitly articulate the relevant graduate employability skills in the learning outcomes for every subject, believe to bolster graduate employability by promoting/supporting extra-curricular and co-curricular activities and skill development (technical and transferable) through work experience, internships and placements and other types of employability strategies.</p> <p>To achieve this goal, the student should have transferable skills which are more important than the particular discipline of study for ensuring the employability. The feedback of the multiple stakeholders and reviewers should be given more importance to produce employable graduates with broad-based experience having ability to solve real life problems and sell their own personal identity, brand and profile. Graduates should be encouraged for lifelong learning to meet the expectations of employers.</p>		
Expected Risks	<ul style="list-style-type: none"> ➤ Barriers to employment, such as gender, ethnicity and socio-economic background that may override employability strategies ➤ Sudden change in required skills and demand in the job market 		
Risk Management Plan	<ul style="list-style-type: none"> ➤ Communication with employers and alumni to identify current needs and expectations from graduates ➤ Special training and courses for students over and above the curriculum to meet desired employable skills ➤ Motivation and soft skill development among graduates to meet unforeseen challenges 		

Key Performance Indicators (Strategic Goal No. 4)

KPI#	Key Performance Indicators	Measurement Level	Benchmark	Target	Measurement Method / Frequency	Responsibility of the Measurement	Responsibility of the Review
4.1	Students overall evaluation on the quality of their learning experiences at the institution	College			University experience survey / Annual	Program Quality Coordinators	Head of Development and Quality Unit
4.2	Proportion of courses in which student evaluations were conducted during the year	College			Data Analysis / Annual		
4.3	Proportion of students entering post graduate programs who complete those programs in specified time	Program			Data Analysis / Annual		
4.4	Proportion of programs in which there was independent verification of standards of student achievement by people external to the institution during the year	College			Data Analysis / Annual		
4.5	Employers' evaluation of the institution graduates proficiency (Reference: NCAAA KPI-I-08, KPI-P-10)	College & Program			Data Analysis / Annual		
4.6	Satisfaction of alumni with technical services (Reference: NCAAA KPI-I-15)	College			Alumni Survey/Annual		
4.7	Proportion of graduates from undergraduate programs who within six months of graduation are: (a) employed (b) enrolled in further study (c) not seeking employment or further study (Reference: NCAAA KPI-I-05)	College			Survey/Annual	Head of Alumni and Training Unit	Vice Dean for Academic Affairs

4.8	Satisfaction of employers with technical services (Reference: NCAAA KPI-I-15)	College			Employer Survey/Annual	Program Quality Coordinators	
4.9	Student evaluation of academic and career counselling through advisory survey	College			Survey/Annual	Head of Student Affairs and Academic Advising Unit	
4.10	Number of field visits arranges in past academic year	Program			Data Analysis / Annual	Program Quality Coordinators	Chairman of the Program
4.11	Proportion of graduation projects related to industry	Program			Data Analysis / Annual	Program Quality Coordinators	

Initiatives and Implementation (Strategic Goal No. 4)

S.No.	Initiative	Beginning Date	Finishing Date	Responsibility
4-1	Signing a memorandum of understanding with industries for better placements			Dean of College of Engineering
4-2	Improving the quality of learning sources using latest software			
4-3	Developing the adequate teaching-learning environment, more of industry oriented			
4-4	Supporting the students with special coaching & training aids			Vice Dean for Academic Affairs
4-5	Initiating a unit to identify and solve real life problems			
4-6	Monitoring and ensuring quality of teaching-learning, making it job oriented			Chairman of the Program
4-7	Development and updating the curriculum as per industry requirements			
4-8	Organization of training programs on latest developments for outgoing students			
4-9	Introducing industry relevant graduation projects			
4-10	Improving the students' academic performance through feedback analysis			
4-11	Establishing competitive post-graduate programs for wide job offers			
4-12	Organizing field visits relevant to curriculum and contemporary issues			
4-13	Conducting and evaluating the summer internship satisfying the required learning outcome			

Description of Strategic Goal No. 5, Key Performance Indicators, and Initiatives

Strategic Goal No. 5	Contribute to the sustainable development of the community by continuing education, training and consultancy services	Responsibility for Implementation:	Alumni and Training Unit & Students Activity unit
Description of Goals	<p>This strategic goal is related to monitor the progress towards meeting the community needs while ensuring that adequate resources are available. It seeks to contribute for a better quality of life for the stakeholders. A sustainable community resembles a living system in which human, natural and economic elements are interdependent and draw strength from each other. Potentially significant services like improved infrastructure, knowledge-based services, environmental technologies, improved management, continuing education and need based trainings shall be arranged to achieve this goal</p>		
Expected Risks	<ul style="list-style-type: none"> ➤ Inadequate financial resources ➤ Rapid changes in the industry development ➤ Limited public and private investments in infrastructure and services 		
Risk Management Plan	<ul style="list-style-type: none"> ✓ Proposal and persuasion for additional financial support from the University ✓ Expanded delivery and use of information technologies ✓ Sustainable training activities centered around areas of technical significance ✓ Adding value to private sectors by conducting continuous consultancy services ✓ Developing, manufacturing, services, and technologies that reduce environmental burdens ✓ Improved consultancy services 		

Key Performance Indicators (Strategic Goal No. 5)

KPI#	Key Performance Indicators	Measurement Level	Benchmark	Target	Measurement Method / Frequency	Responsibility of the Measurement	Responsibility of the Review
5.1	Proportion of full time teaching and other staff actively engaged in community service activities (Reference: NCAAA KPI-I-23)	College			University experience survey / Annual	Program Quality Coordinators	Head of Development and Quality Unit
5.2	Number of community education programs provided as a proportion of the number of academic programs	Program			Data Analysis / Annual		
5.3	Satisfaction of beneficiaries with the community services (Reference: NCAAA KPI-I-15, KPI-I-22, KPI-P-02)	College & Program			Data Analysis / Annual		
5.4	Proportion of faculty members who reviewed research articles	Program			Data Analysis / Annual		
5.5 / 3.27	Number of faculty serving on editorial boards of international ISI journals (Reference: old strategic plan KPI 2.12)	College & Program			Data Analysis / Annual		
5.6 / 3.28	Number of faculty who served as editors or sessions' chairs in national and international conferences (Reference: old strategic plan KPI 2.13)	College & Program			Data Analysis / Annual		
5.7	Proportion of faculty who contributed in reviewing the articles for journals and conferences	Program			Data Analysis / Annual		
5.8	Proportion of faculty who reviewed books and masters/PhD thesis	Program			Data Analysis / Annual		
5.9	Number of professional training programs over and above the curriculum arranged by faculty	Program					

5.10	Faculty satisfaction related to the involvement in community service activities (Average overall rating on a five point scale of an annual survey)	Program			Survey / Annual		
5.11	Proportion of full time teaching and other staff actively engaged in applying for research projects funded by public and private entities (outside KKU) such as Municipalities, SABIC and KACST etc.	Program			Survey / Annual		

Initiatives and Implementation (Strategic Goal No. 5)

S.No.	Initiative	Beginning Date	Finishing Date	Responsibility
5-1	Develop a plan to enhance the community service activities, monitor engineering problems and find appropriate solutions according to the college strategic goals			Dean of College of Engineering
5-2	Provide and develop community services activities (sessions, consulting, continuing education, seminars, and workshops)			
5-3	Evaluate and measure the level of satisfaction of the beneficiaries			Vice Dean for Academic Affairs
5-4	Augment the contributions of college faculty members in community service activities			
5-5	Encourage faculty to apply for local research projects funded by public and private entities such as Municipalities, SABIC and KACST			Chairman of the Program
5-6	Motivate faculty to get the membership in professional organizations			
5-7	Involving students in recycling and conservation of environmental resources			
5-8	Participate in socio-cultural and community events			

Description of Strategic Goal No. 6, Key Performance Indicators, and Initiatives

Strategic Goal No. 6	To improve financial resources	Responsibility for Implementation:	College Council
Description of Goals	This goal is concerned with activating and developing the college financial system by increasing its financial revenues, and decreasing reliance on the university funding. This can be achieved by creating and marketing the material, human power and endowment resources in addition to activating and marketing various services of the college		
Expected Risks	<ul style="list-style-type: none"> ➤ Poor response from the supportive external bodies ➤ Prevalent financial systems ➤ Restricted financial autonomy 		
Risk Management Plan	<ul style="list-style-type: none"> ✓ Proposal and persuasion for additional financial support from the University ✓ Replacement or upgradation of obsolete equipment ✓ Motivating the faculty members for collaborative research with industries and colleges of other Universities ✓ Promoting consultancy projects and interdisciplinary (inter program, inter college) projects ✓ Establishing self-financing programs, continuing education programs to generate revenue ✓ Marketing the college (conferences, workshops, websites to show faculty expertise, research services, and equipment) ✓ Establishing an internal auditing system 		

Key Performance Indicators (Strategic Goal No. 6)

KPI#	Key Performance Indicators	Measurement Level	Benchmark	Target	Measurement Method / Frequency	Responsibility of the Measurement	Responsibility of the Review
6.1	Percentage of self-income of the institution (Reference: NCAAA KPI-I-14)	College			Revenue and Budget / Annually	Head of Development and Quality Unit	Dean of College of Engineering
6.2	Ratio of the annual revenues obtained from the investment projects to the value of the college endowments	College			College Revenue / Annually	Head of Development and Quality Unit	Dean of College of Engineering
6.3	Annual expenditure rate per student (Reference: NCAAA KPI-I-09)	College			College endowment / Annually	Head of Development and Quality Unit	Dean of College of Engineering
6.4	Proportion of total operating funds (other than accommodation and student allowances) allocated to provision of student services	College			Operating expenditure / Annually	Head of Development and Quality Unit	Vice Dean for Academic Affairs
6.5	Annual expenditure on IT as a proportion of the number of students	College			IT expenditure / Annually	Head , IT and Computer Labs	Vice Dean for Academic Affairs
6.6	Total operating expenditure (other than accommodation and student allowances) per student	program			Operating expenditure / Annually	Chairman of the Program	Vice Dean for Academic Affairs
6.7	Research income from external sources in the past year as a proportion of the number of full time teaching staff members	program			Research Income / Annually	Chairman of the Program	Vice Dean for Academic Affairs

6.8	Proportion of the budget dedicated to research (Reference: NCAAA KPI-I-20)	College			Research budget / Annually	Director of Research Center	Vice Dean for Academic Affairs
6.9	Proportion of external funding for research (Reference: NCAAA KPI-I-21)	College			Research fund / Annually	Director of Research Center	Vice Dean for Academic Affairs

Initiatives and Implementation (Strategic Goal No. 6)

S.No.	Initiative	Beginning Date	Finishing Date	Responsibility
6-1	Developing a college budget allocation system			Dean of College of Engineering
6-2	Activating the college Endowments			
6-3	Activating and developing the policies for investment projects			
6-4	Inviting budgetary proposals from the departments			
6-5	Proposal and persuasion for additional financial support from the University			
6-6	Establishing an internal auditing system			
6-7	Motivating the faculty members for collaborative research with industries and colleges of other Universities			Vice Dean for Academic Affairs
6-8	Replacement or upgradation of obsolete equipment in workshops and laboratories			
6-9	Marketing the each department (through conferences and workshops, websites to show faculty expertise, research services, and equipment)			Chairman of the Program
6-10	Establishing self-financing programs, continuing education programs to generate revenue			
6-11	Promoting consultancy projects and interdisciplinary (inter program, inter college) projects			
6-12	Initiate proposal to benefit from Awkaf scheme of KKU			

Mapping of NCAAA Institutional KPIs with the KPIs of Strategic Goals

NCAAA Institutional KPI	Equivalent KPI of College of Engineering Strategic Goal
KPI-I-01	1.29
KPI-I-02	1.10
KPI-I-03	1.1
KPI-I-04	1.5
KPI-I-05	1.26, 4.7
KPI-I-06	1.7
KPI-I-07	1.9, 1.22, 1.23, 1.28
KPI-I-08	4.5
KPI-I-09	6.3
KPI-I-10	1.1, 1.27
KPI-I-11	1.12
KPI-I-12	1.13
KPI-I-13	1.18, 1.19
KPI-I-14	6.1
KPI-I-15	1.1, 1.23, 4.5, 4.6, 5.3
KPI-I-16	3.16
KPI-I-17	3.11
KPI-I-18	3.15
KPI-I-19	3.10, 3.13, 3.14
KPI-I-20	6.8
KPI-I-21	6.9
KPI-I-22	5.3
KPI-I-23	5.1

Mapping of NCAAA Program KPIs with the KPIs of Strategic Goals

NCAAA Institutional KPI	Equivalent KPI of College of Engineering Strategic Goal
KPI-P-01	1.29
KPI-P-02	5.3
KPI-P-03	1.1
KPI-P-04	1.5
KPI-P-05	1.7
KPI-P-06	1.30
KPI-P-07	1.24
KPI-P-08	1.26
KPI-P-09	1.31
KPI-P-10	4.5
KPI-P-11	1.1
KPI-P-12	1.12
KPI-P-13	1.21
KPI-P-14	1.18, 1.19
KPI-P-15	3.16
KPI-P-16	3.11
KPI-P-17	3.15
KPI-P-18	1.9, 1.22, 1.23, 1.28