

Quality Management System

College of Science

Version 1, 2021

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Abbreviations

APR:	Annual Program Report
CoS :	College of Science
CS:	Course Specifications
CR:	Course Reports
DSA:	Deanship of Students Affairs
DFA:	Deanship of Faculty Affairs
DLA:	Deanship of Library Affairs
DPS:	Deanship Postgraduate Studies
DSR:	Deanship of Scientific Research
DSA:	Deanship of Students Affairs
KFU:	King Faisal University
NCAAA:	National Centre for Assessment and Academic Accreditation
PS:	Program Specifications
QMS:	Quality Management System
QMS-KFU:	Quality Management System, King Faisal University
QMS-CoS:	Quality Management System, College of Science
SSRP:	Self-Study Report for Program

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Introduction

The Quality Management System (QMS) of College of Science (QMS_CoS) documents the structure and design of the college's quality practices, the interconnectedness of the practices that constitute the system, and the operational arrangements which support the quality assurance activities and academic standards at the College.

This document articulates CS's commitment to quality and continuous improvement that aligned with University QMS (QMS_KFU). It gives an outline of the key practices with references to policies and procedures that comprise CS's QMS. This manual provides a holistic and integrative view of the quality management of the CS's activities. The activities and practices that are described apply to the entire CS's community which comprise with four departments and each one with male and female branches.

Remark: Several parts of this booklet is part of **Quality Management System (V2), King Faisal University** in the context of quality practices in College of Science's departments and programs.

Organizational Structure

College Level

College Council

The main administrative authority in the college of Science is the College Council, headed by the Dean of the College. The College Council is the committee tasked with supporting the Dean in providing clear operational direction. The Council will meet at least twice a semester and have a quorum of 50% of the membership. Non-members may be invited by the Dean to attend meetings to provide specialist information. They will however have no voting right.

The other members are the four Vice-Deans and the four head of departments. The four vice-deanships reporting to the Dean are:

1. **Vice-Deanship of Academic Affairs:** All the academic departments of the College report to the Vice Dean on the academic affairs of undergraduate students. The main tasks of this vice-deanship include, but are not limited to, (a) coordinating the academic agenda of the college, the examination schedule, student academic records, (b) coordinating the admission and registration of undergraduate students in all matters related to the academic affairs of undergraduate students.
2. **Vice-Deanship of Studies, Development and Community Engagement / Service (SDCS):** This Vice-Deanship plays a key role in the preparation of development plans and programs, and in the supervision of their implementation to achieve a high level of learning outcomes, quality of performance and excellence in education and research and to achieve a successful outcome. As required by the National Development Plans and Vision 2030, and quality monitoring and promotion to obtain national and international accreditation while working to sustain developments. The committees associated with this Vice-Deanship are:
 - (a) The Cooperative Training and Community Partnership Committee
 - (b) The Development and Quality Assurance Committee
3. **Vice-Deanship of Graduate Studies and Scientific Research:** The responsibility of the Vice-Deanship is to look after all the academic and students' activities related to graduate programs in the College, and scientific research. The Deanship also monitors the safety and

the development of labs. The committees supported to accomplish the task of the Vice-Deanship are:

(a) Postgraduate Studies and Scientific Research Committee

(b) Safety and Lab Committee

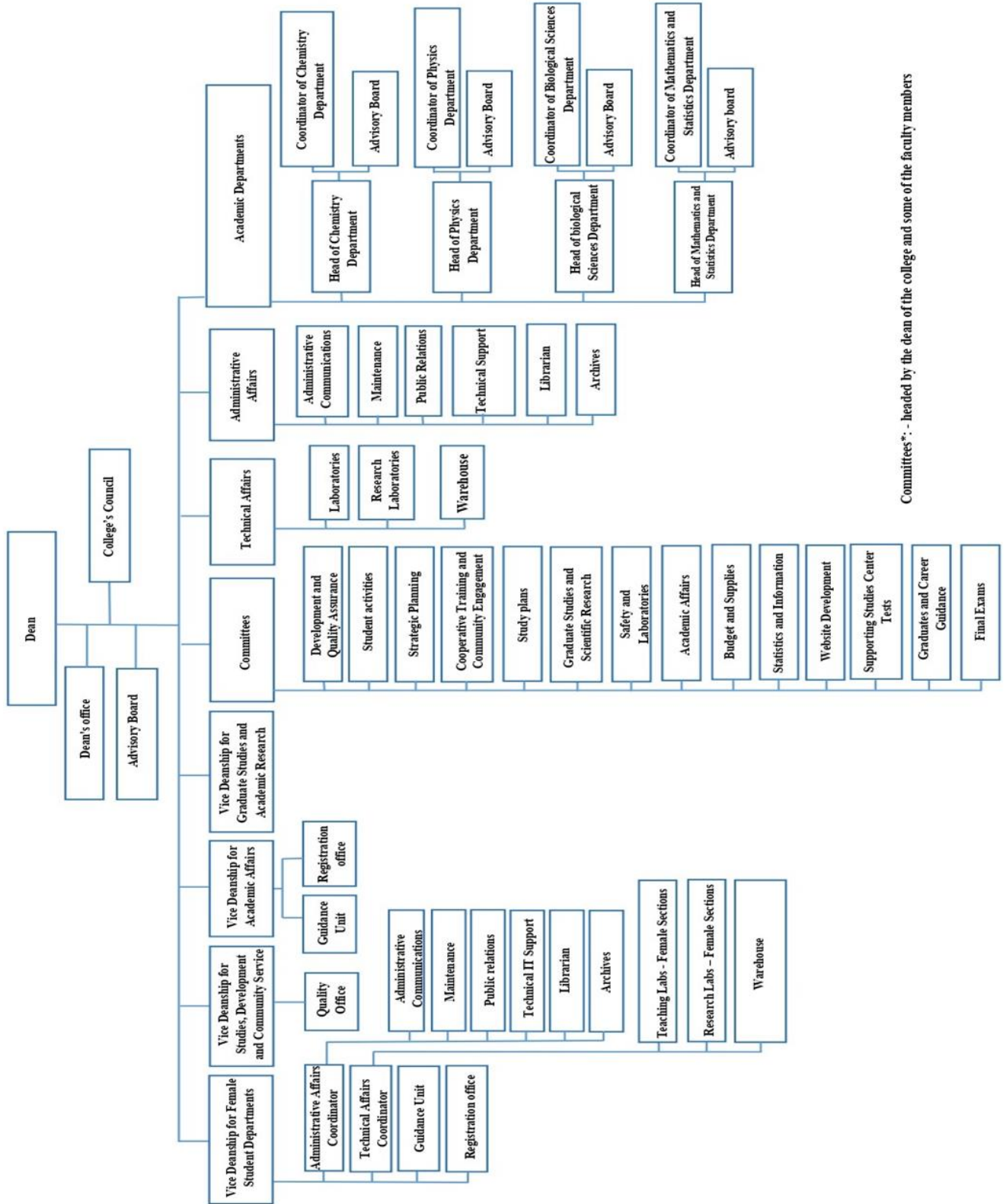
4. **Vice-Deanship for Female Students Departments:** The aim of the establishment of this Vice-Deanship is to supervise the progress of the educational process in the female section and to follow up all administrative and technical affairs, keep the uniformity between male and female section.
5. **Head of Academic Programs Departments:** The head of the department is responsible to manage day to day tasks in the program and be the head of the department council.

The college website (<https://www.kfu.edu.sa/en/Colleges/Science/Pages/Home-new.aspx>) provides more details about the tasks and responsibilities of the Vice-Deanship. As shown in the CS organizational chart (Figure 1), the main tasks of the college administered by various committees supervised by the Dean and Vice-Deans. The tasks of Vice Deans and associated committees are well defined and displayed on the website of the College. They are empowered to make decisions relating to their tasks. All major issues and developments are generally referred to the Dean by the Department Councils/ Heads, Vice-Deans and College Committees. The Dean raises the issues for further discussion at the College Council meeting who establish policies in accordance with the rules of the University and exercises full authority to take decisions on administrative and academic as well as non-academic matters. The Council discusses and resolves critical issues of the College, sets out strategic directions, discusses regulations and operational guidelines.

College Committees

One of the most essential concepts that administration implements is the appointment of committees in colleges to efficiently monitor the mechanism of learning, research, and different services. On this basis, committees are a dimension of administration and a complimentary part of the college management structure that helps to execute various duties. Committees assist the College Board and the dean by frequent meeting recommendations to implement suitable changes to enhance education, research, and miscellaneous facilities. The following are the current list of committees in the college:

1. **College-Curriculum Committee:** Headed by Dean of the college and members are faculty member from each program who are also the head of the program Curriculum Committee.



Committees*: - headed by the dean of the college and some of the faculty members

Figure 1: College of Science Organizational Chart

2. **The Committee of Academic Affairs:** Headed by the vice dean of Academic Affairs and members are faculty member from each program who are also the head of the program-Curriculum Committee.
3. **The Committee of Development and Quality Assurance:** Headed by the Vice-Deanship of Studies, Development and Community Engagement / Service (SDCS) and primary members are faculty member from each program who are also the head of the program-Curriculum Committee. Additional members are selected by the Vice dean as per requirements.
4. **The Committee of Postgraduate Studies and Scientific Research:** Headed by the Vice-Deanship of Graduate Studies and Scientific Research and head of all four program's scientific research committees are the member of this committee.
5. **The Committee of Strategic Planning and Decision Support:** Headed by the Vice-Deanship of Studies, Development and Community Engagement / Service (SDCS) with faculties from all programs are the member of this committee.
6. **The Committee of Student Activities:** Headed by the Vice-Deanship of academic affairs.
7. **Safety and Lab Committee:** Headed by the Vice-Deanship of Graduate Studies and Scientific Research, and member are faculty members from all four departments.

In addition to the above committees, there are following committees that facilitates the smooth functioning of all activities in the college and programs within it:

- I. Budget and Supplies
- II. Statistics and Information
- III. Website Development
- IV. Supporting Study centre tests
- V. Scientific Meeting committees
- VI. Graduates and Career guidance centre.
- VII. Examination.

The details responsibilities and duties of each committees are clearly listed in the committee formation order signed by the dean. All the listed tasks are in the alignment of tasks mention in the university Quality Management system [QMS-KFU].

Department Level

Department Council

All four department in the college of Science is governed by the department council leads by the Chairman of the department. The council is accountable for day-to-day course monitoring and program level monitoring including the study plans and curriculum. The council also recommends the appointing

of faculty members and their assistants as well as study the research projects and encourage the faculty to conduct research. The council is supported by several committees from faculty members.

Departmental Committees

There is total fifteen (15) established department committees headed by the Chairman of the Department. Department council and relevant college committee. The recommendations of these committees are directly raised to the Department council and relevant college committees. The established department committees aim to involve all members in running the program and sharing them in decision making process. These committees are dealing with different matters of administrative and academic issues, as the following:

1. **Higher supervisory Committee:** The committee follows-up the implementation of the executive projects and procedural activities of the strategic plan and determines the achievement rates in consultation with the chairmen of the committees. In addition, this committee submits a combined report on the achieved work of the various department committees at the end of each academic semester.
2. **Academic Affairs Committee:** This committee deals with the preparation and coordination of the teaching department's schedule for each semester, supervising students' registration in courses, following up the tutorial lecturers during the reports. Additionally, this committee receives and studies all complaints and inquiries from students and submit them to the head of the department.
3. **Quality Assurance Committee:** The committee ensures the implementation, and development of quality actions and the achievement of the program mission and objectives. Moreover, it prepares the annual program report program KPIs, self-study reports and updates the program and course specifications. Additionally, it prepares documents for academic accreditation, and questionnaires related to students and program working staff concerning quality assurance processes and the use of subsequent results in the development planning strategies.
4. **Curriculum Committee:** The committee discusses and recommends on issues affecting the academic program, including but not limited to course modifications according to stakeholder needs, change in the program, addition of new programs, degree requirements, and general policies with impact on instruction and learning such as exam moderations and verifications.
5. **Cooperative Training & Community Partnership Committee:** The committee promotes ties among the University, companies, and private and public institutions. It also works on finding suitable training opportunities in coordination with the department and other

entities providing internships inside the Kingdom. Additionally, the committee holds training partnerships with governmental and private bodies, develops the field training plan within the department and supervises research projects for seeking to develop the mechanism of graduation projects and creating a database for all graduates in the department.

6. **Academic Guidance & Counselling Committee:** The committee provides academic guidance during the registration stages, prepares a list of the academically underachieving students at the beginning of each semester, organizes supporting lectures for them and provides psychological and professional guidance services. Additionally, the committee monitors the attendance on the banner system and reports periodically to the head of the department.
7. **Scientific Research Committee:** The scientific research committee has one or more representative(s) at both male and female campuses who are working together to ensure the equality of research facilities at both sides. Also, visits are arranged between the two campuses to discuss the opportunities for collaboration and to solve any faced obstacles in research. In addition, the committee is always working with other committees in the department including laboratory and seminar committees as well as the postgraduate committee to follow up on the execution of all research objectives of the program action plans at both male and female divisions. Moreover, the committee prepares database of published research papers for faculty members, scientific research report for the department, and proposes sources for scientific research collaborations (internal and external sources).
8. **Recruitment & Human Resources Committee:** The recruitment committee prepares the list of teaching and research faculty vacancies and their qualification. The committee is always seeking to attract and hire faculty members with educational and research competences.
9. **Postgraduate Studies Committee:** The main role of this committee is to follow- up the postgraduate academic plan and to assign supervisors for all the MSc students. Moreover, the committee ensures the application of the standards of scientific theses and controls the formation of committees to discuss scientific theses.
10. **Scholarship Committee:** This committee helps demonstrators and lecturers to get admission in international universities to pursue their graduate studies, study the applications for admission., and establishes the communications with the MSc or PhD supervisors.
11. **Safety Laboratories Committee:** This committee controls the organization and development of laboratories, determines the required needs in terms of chemicals and glassware, checks the efficiency condition of all laboratory apparatuses and supervises the overall cleanliness condition of the labs.

12. **Graduation projects & Talented students committee:** The committee spreads the information about the graduation project in the department through the awareness seminars. It submits a clear mechanism for the implementation and evaluation of the project and prepares initial and final committees to discuss the projects. Other activities related to this committee include, spreading a culture of talent, creativity and excellence among students and motivating students by honoring the distinguished and talented one.
13. **Activities Committee:** This committee prepares a time plan for student scientific and cultural sports and recreational events. It coordinates with the college committee and deanship of student affairs in all matters related to student activities and activates the student club in the department.
14. **Promotion Committee:** It receives promotion requests from the members of the department and study them according to the regulations and the policies of the University. The committee proposes the names of referees to check the quality of the applications that include the scientific production of the faculty member.
15. **Advisory Committee for Program:** This committee contributes to the development and improvement of quality of outcomes related to education, research and service processes that align with the needs of labor market and the community.

Alignment with University’s Organizational Requirements

Each colleges, branches and centers should abide with the institutional quality framework. The framework that establishes effective leadership to guide and oversee the systematic monitoring and evaluation of learning and teaching, and the processes that support them, to make sure that the standards of academic procedure are maintained, and that the quality of the student learning experience is being safeguarded and improved. The main feature of this framework is shown in the **Error! Reference source not found.** It is evident from the preceding description that the College of Science's organizational structure is fully aligned with the quality framework of the university which assists the university in all its efforts to achieve administrative and academic excellence.

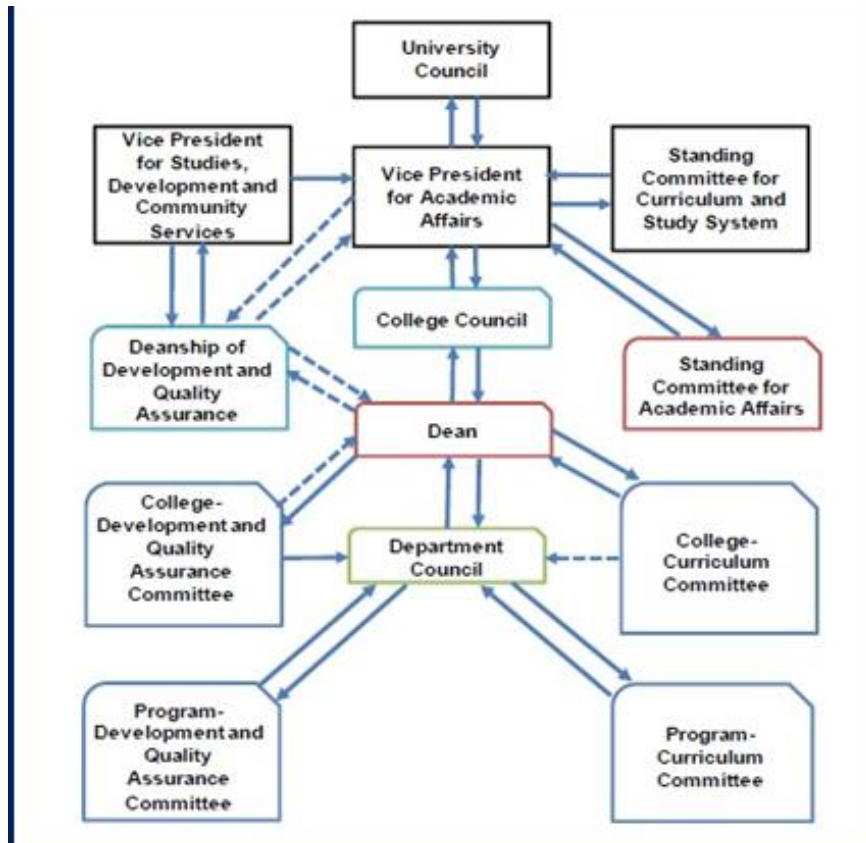


Figure 2 : Quality Assurance System.

Execution of Academic program and Monitoring Quality Practices

Execution of Academic program

As per policy of the university a newly developed program or an existence program must be executed exactly as it is approved. Following units are responsible of the execution process:

- **Deanship of Admission and Registrations:** The Deanship of admission and registrations is responsible for (i) Managing the process of the admission of students. (ii) Managing the students' registrations in the program. (iii) Managing the registrations of courses. (iv) Publishing the annual academic calendar which include all related important dates and deadlines such as dates for courses registrations, deadlines for withdrawing from courses.
- **Vice Dean of Academic Affairs:** The vice dean of academic affairs is responsible for (i) Developing the courses schedules each semester (ii) Supporting students during courses registrations (iii) Developing the final exam schedules. (iv) Supervising the conducting of final exams.
- **Program Leader/Coordinator:** The program leader here refers to the Chairman of the department. However, for smooth functioning the chairman has the rights to distribute the task among suitable faculty members. The program coordinator is responsible for (i) Proposing the courses and sections to be delivered in each semester. (ii) Proposing the course coordinators for different courses. (iii) Following-up the submission of courses reports. (iv) Supervising the preparation of annual program report. (v) Supervising the implementation of the program assessment plan. (vi) Developing the improvement plans.
- **Course Coordinator:** A course coordinator for each course is proposed by the department chair and approved by department council. The course coordinator is the official source of information and documents related to the course. The course coordinator may teach the course or a senior faculty member who has strong experience in the course who only coordinate the course. The responsibilities of course coordinator: (i) Develop and update the Course Specification using the NCAAA. (ii) For Multi-instructor courses, the course coordinator coordinates among all the instructors about their coverage of the course and help them prepare a syllabus for the entire course together. (iii) Approve the quiz, mid-term, final, lab topics and project for the course. (iv) Prepares the Combined Course Report based on individual reports submitted by course instructors.

Monitoring Quality practices.

To ensure the quality of academic program, the academic programs must be assessed. In college of Science programs are assessed at course level as well as program level. The results of the program assessments are analyzed annually. The findings of the analysis of the results of the program assessments are used improve the execution of the program as well as to make the major/minor revision of the program. The following units participates in the program quality assurance:

Course Instructor: Course Instructors are responsible for the assessments of course learning outcomes and provide information and action plan for improvement for a course to the course coordinator for the preparation of combined course report.

Course Coordinator: Responsible for preparation of exam, arrangement of final exam answer sheet moderation, the assessment of combined course learning outcomes, prepare the combined course report with the collaboration of course instructors, finally prepare and submit the course portfolio.

Department Curriculum Committee: Prepare the program learning outcome (PLO) assessment plan, analysis the results of the program assessments, and use it for periodic improvement.

Department Quality Assurance Committee: The responsibilities of this committee include, but are not limited to, the collection of the end-semester course portfolios, the review of course portfolios, the implementation of the program assessment process, analysis the course reports and use it to prepare the annual report, monitoring the progress of Key Performance Indicator (KPIs), and preparation of Self-Study report for program accreditation.

Department Council: Discussing and approving the improvement actions, Annual Program Report (APR), Students Survey Response report.

College Quality and accreditation committee: Following-up the implementation of the program assessment plan, Review and approve Programs Annual Reports, KPIs.

Program Advisory Committee: Evaluate academic programs proposed by the department and provide advice and opinion to upgrade, improve and adapt them to meet the changing labor market needs.

College Council: Approving the proposed improvement actions.

Program Assessment

A well-defined assessment process must be developed for each program; the core of the assessment process is the assessment plan, types of assessment methods, assessment results analysis, and assessment tools. All the programs in the college of Science have well-defined assessment process.

Program Assessment Plan

Program Assessments Plan shows all assessments activities that will be implemented within a cycle of 2/3 years, the timeline of conducting each activity, and the responsibility of each activity. All four programs in the college have well-structured learning outcome assessment plan as per following university template:

Program Learning Outcome	Academic Year 2020-2021		Academic Year 2021-2022		List of courses to be used to assess each outcome
	1 st Sem.	2 nd Sem.	1 st Sem.	2 nd Sem.	
Knowledge and Understanding					
K1	X				
K2		X			
K3			X		
Skills					
S1		X			
S2	X				
.				X	
Values					
V1	X				
V2			X		
Course Evaluation					
Course Evaluation survey	X	X	X	X	
Student Experience Survey	X	X	X	X	
Employer survey		X		X	
Alumni Survey		X		X	
KPIs calculations and analysis		X		X	

Table 1 : Program Assessment Plan template

Program Assessment Methods

Assessment methods are classified into direct and indirect methods.

The direct assessment methods: these are assessments methods in which students' works in courses, field experience/internship are used. Examples of direct assessment methods:

- Exams in different courses
- Projects
- Presentations

- Group discussions
- Assignments

The assessments of learning program outcomes must use direct assessments methods. All programs in the college are using the above direct assessment methods.

The indirect assessment methods: these are assessments methods in which stakeholders' feedback about the program. The indirect methods mention in KFU-QMS and that are followed by college of Science programs are listed below:

- Course evaluation survey using NCAAA template.
- Program experience survey using NCAAA template.
- Program evaluation surveys using NCAAA template.
- Alumni survey
- Employer survey.

Program Key Performance Indicator (KPIs)

Key Performance Indicators (KPIs) are very much essential for a program. All four programs in the College of Science uniformly follow seventeen KPIs specified by the NCAAA. Several activities are in action to measure all KPIs. Program's quality assurance committee is responsible for documenting the final version of the KPI's annual report. However, the role for KPI calculation is delegated to several committees, as indicated in *Table 2* below.

KPI No.	KPI	Responsible committee(college/program) , Vice-Deanship/program chair for core Data	Remarks	Responsible Committee (program level, except for KPI 7 & KPI 9) to receive/collect the data and prepare analytical report (Attached template)
KPI-P-1	Percentage of achieved indicators of the program operational plan objectives	Strategic Planning Committee, College Note: Achievement data should be approved and provided by the College's Strategic plan committee <u>on 15th Week of 2nd semester.</u>	An annual achievement report highlighting the percentage achievement of the program operational plans.	Operational Plan committee, Program

KPI No.	KPI	Responsible committee(college/program) , Vice-Deanship/program chair for core Data	Remarks	Responsible Committee (program level, except for KPI 7 & KPI 9) to receive/collect the data and prepare analytical report (Attached template)
KPI-P-2	Students' Evaluation of quality of learning experience in the program	Centre for the Measurement and Evaluation of KFU for conducting the program, experience, and course evaluation surveys, which are accessible by the Chairmen of the programs.	The Chairmen of the programs to provide the raw statistics data of the program, experience, and course evaluation surveys to the QAC of the programs, who will finalize the reports.	QAC, Program
KPI- P-3	Students' evaluation of the quality of the courses	Note: If the data is not readily available in online system, it is recommended that the program QAC/Chairman make a Shrek order <u>on the end of each semester</u> to CME for the survey data.		
KPI-P-4	Completion rate	Vice-Dean Academic Affairs & Vice-Dean Quality Assurance Committee, College Note: <u>Cohort data should be after Summer semester for appropriate calculation of this KPI</u>	An appropriate cohort data for the previous academic year should be arranged and shared with the program's QACs. The result is in percentage.	Academic Affairs, Program

KPI No.	KPI	Responsible committee(college/program) , Vice-Deanship/program chair for core Data	Remarks	Responsible Committee (program level, except for KPI 7 & KPI 9) to receive/collect the data and prepare analytical report (Attached template)
KPI-P-5	First-Year students retention rate	Academic affairs Committee, Program Note: This data should be available in <u>the end of second semester of each academic year.</u>	This is in percentage.	Academic Affairs, Program
KPI-P-6	Students' performance in the professional and/or national examinations	Vice-Dean Academic Affairs, College	This is related with the performance of College's students in the national examinations and should be a number, in terms of the position.	Activities Committee, Program
KPI-P-7	Graduates' employability & enrolment in postgraduate programs	Alumni Committee, College Note: This is better to calculate based on one year before Graduates. Example if report is for Academic year 1441-42, check the status of Graduates for academic year 1440-41. The committee need to decide proper method to accumulate more data. <u>the end of second semester of each academic year.</u>	The report should clearly reflect both points separately in terms of percentage.	Alumni Committee, College Note: The analysis of this report should explain which year's Graduates and what kind of the job etc.

KPI No.	KPI	Responsible committee(college/program) , Vice-Deanship/program chair for core Data	Remarks	Responsible Committee (program level, except for KPI 7 & KPI 9) to receive/collect the data and prepare analytical report (Attached template)
KPI-P-8	Average number of students in the class	<p>Academic Affairs Committee, Program</p> <p>Note: This data can be made available <u>within 6th weeks of starting for each semester.</u></p>	<p>This should be provided for both male and female students separately as the numbers.</p>	<p>Academic Affairs, Program</p> <p>Note: For this KPI, annual statistics is required, but in the analysis semester wise data can be include.</p>
IKPI-P-9	Employers' evaluation of the program graduate's proficiency	Community engagement Committee, College	The report should provide the analysis in terms of scale out of 5.	Community engagement Committee, College
KPI-P-10	Students' satisfaction with the offered services	<p>Centre for the Measurement and Evaluation of KFU for conducting the program, experience and course evaluation surveys, which are accessible by the Chairmen of the programs <u>on the end of each semester</u></p>	<p>The Chairmen of the programs to provide the raw statistics data of the program, experience and course evaluation surveys to the QAC of the programs, who will finalize the reports.</p>	QAC, Program

KPI No.	KPI	Responsible committee(college/program) , Vice-Deanship/program chair for core Data	Remarks	Responsible Committee (program level, except for KPI 7 & KPI 9) to receive/collect the data and prepare analytical report (Attached template)
KPI-P-11	Ratio of students to teaching staff	Academic Affairs Committee, Program This data can be made available <u>within 6th weeks of starting for each semester.</u>	1. This should be provided for both males and females separately as the ratio. 2. The ratio should be based on (a)PhD faculty members to students and (b) all the teaching staff to the students.	Academic Affairs Committee, Program
KPI-P-12	Percentage of teaching staff distribution	Recruitment and Human resources committee, Program This data can be made available <u>within 6th weeks of starting for each semester.</u>	The male/female distribution ration should be based on PhD faculty members and all teaching staff separately.	Recruitment and Human Resources committee, Program
KPI-P-13	Proportion of teaching staff leaving the program	This data can be made available <u>within 6th weeks of starting for each semester.</u>	This should be provided for both males and females separately as the numbers.	
KPI-P-14	Percentage of publications of faculty members	Scientific Research Committee, Program	This should be provided for both males and females separately as percentage.	

KPI No.	KPI	Responsible committee(college/program) , Vice-Deanship/program chair for core Data	Remarks	Responsible Committee (program level, except for KPI 7 & KPI 9) to receive/collect the data and prepare analytical report (Attached template)
KPI-P-15	Rate of published research per faculty member		This should be provided for both males and females separately as a number.	Scientific Research Committee, Program
KPI-P-16	Citations rate in refereed journals per faculty member		This should be provided for both males and females separately as a number for the previous calendar year.	
KPI-P-17	Satisfaction of beneficiaries with the learning resources	<p>For students, Centre for the Measurement and Evaluation of KFU for conducting the program, experience, and course evaluation surveys, which are accessible by the Chairmen of the programs <u>on the end of each semester</u>.</p> <p>For faculty members, an allocated survey would be run, and the raw data should be provided <u>on the end of 2nd semester</u>.</p>	The Chairmen of the programs to provide the raw statistics data of the program, experience, and course evaluation surveys to the QAC of the programs, who will finalize both reports.	QAC, Program

Table 2: List of Under-graduate Program KPIs and Responsible units

Peer Review Teaching

To share experience of teaching between faculty members, all four programs in the college of Science operates a peer review of teaching approach or teaching observation scheme. Each member of faculty will, on an annual basis, have at least one of their teaching sessions observed. The peers involved will provide feedback as a critical friend, and that feedback will be used as the basis for planning any further staff development. Teaching Observation Policy are mention in QMS- KFU, Page 112-119 in details.

Analysis of documentation of assessment

The results of the different program assessments activities must be analyzed. Improvement actions must be proposed according to the findings of the analysis of the program assessments results. The results of assessments, analysis of results, findings of the analysis, advisory committee recommendations, and the improvement actions must be documented in courses report and annual program report.

Course Report (CR) : [QMS- KFU, Page 50] according to NCAAA standards, a course report must be developed for each course delivered in the academic year. A single course report for all sections must be developed. Usually, a course is delivered in the first semester or in the second semester according to the level of the course in program study plan. In some cases, the course is delivered in the two semesters. If the course is delivered in the two semesters, it is recommended to develop the course report in one semester only. If the course is in the program study plan in the odd levels (levels: 1, 3, 5, 7), then a course report must be developed in the first semester. If the course is in the program study plan in the even levels (levels: 2, 4, 6, 8), then a course report must be developed in the second semester. The course report includes detailed information about the course delivery in the semester: It includes, for example: analysis of the students' performance in different sections, the actual contact hours and topics covered, results and analysis of course learning outcomes assessments. Follow-up the implementation of the improvement actions that were proposed in the previous semester, and the new proposed improvement actions.

The course coordinator is responsible to prepare the course report with the assistance of all the course's instructors.

Reviewing Course Report (CR) : Program quality assurance committee need to set a team to review the course report and course portfolios submitted by the course coordinator. The purpose of reviewing to ensure that all part of CR is fully compliance with the requirement and the course portfolio contains all requirements.

Annual Program Report (APR) : [QMS- KFU, Page 50-51] According to NCAAA standards, an annual program report for each program must be prepared at the end of each academic year. The APR includes detailed information about the delivery of the program in the academic year. APR includes for example, discussion of the implementation of the previous action plan, analysis of the statistics about students' enrollments and graduation, analysis of program learning outcome assessments, summary of course reports, program activities and program evaluation. The department quality assurance committee is responsible for preparing the APR.

Policies of Periodic Program Review

To improve the quality of academic programs, the improvement action plans which are proposed in course reports and annual program report must be discussed and approved.

Courses reports workshops: [QMS- KFU, Page 51] At the end of each semester, a workshop to discuss all courses' reports is conducted in each department. The workshop is considered as a department meeting. All faculty members must attend it. Each course coordinator presents his course reports. The proposed action plans to improve the course are discussed. The feedback of all department members about the proposed actions are discussed and documented. All proposed actions and department members' comments are discussed by the department quality and curriculum committee. A report about workshop which includes all proposed action plan is prepared by the department quality and curriculum committee. The reports include immediate actions that can be implemented immediately at the course level, and major actions that must be documented in the APR for implementation in the program major revision. The course specifications are updated according to the immediate proposed actions, the new courses' specifications then will be forwarded to the department for discussion and approval. After, approving the new courses' specifications by the department council, they are forwarded to the college curriculum committee to ensure that changes in the courses is consistent with curriculum standards. Then the course specifications will be forwarded to the college quality committee to ensure that all specifications are updated according to quality and accreditation standards. **Figure 3** shows the flowchart for utilizing course report in improving the quality of the course.

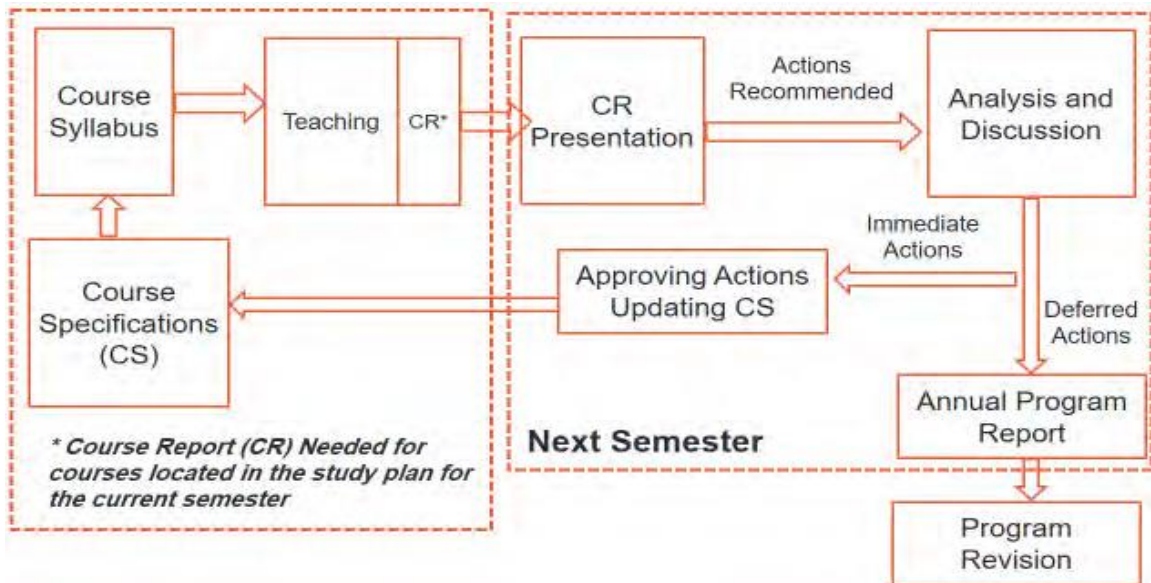


Figure 3: Flowchart for utilizing course report in improving the quality of program.

Implementation of APR action plan

At the beginning of each academic year, the APR of the previous year is discussed in the department council, the action plans that are related to major change in the curriculum is delayed for implementation in the major program revisions. The other action plans will be implemented under the supervision of the program coordinator.

Changes in the curriculum

College of Science follows the university rules for the interim changes of Curriculum as per requirements and recommendation by the course instructor, course students, student's evaluation, advisory committee in the respective programs and college advisory committee. The changes can be classified into three categories based on the approval requirements.

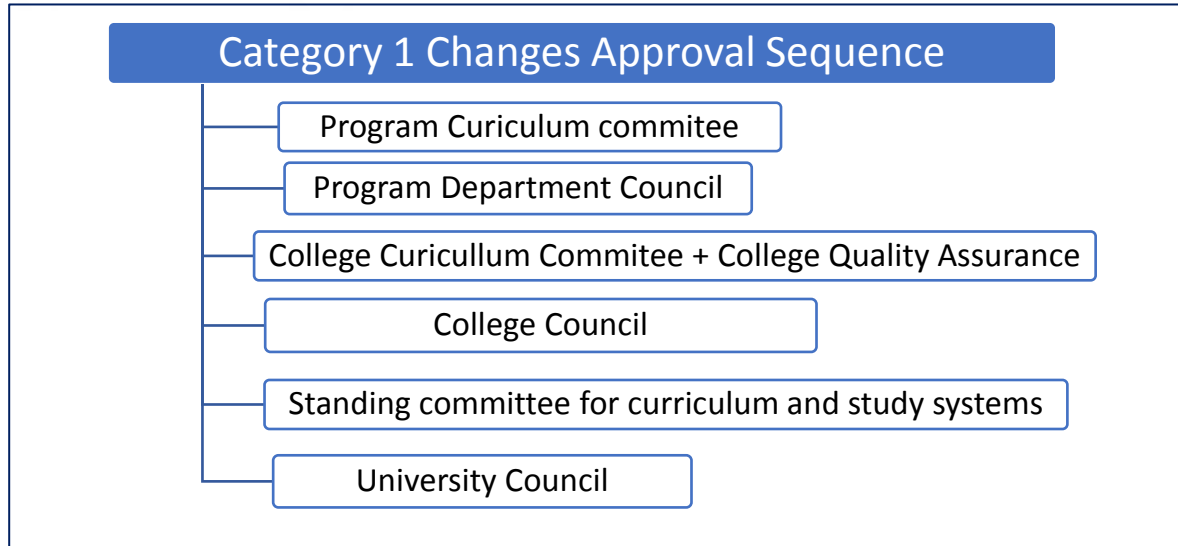
Category 1 Changes:

The list of changes that are categories as Category 1 are Program title and code

- Total credit hours needed for completion of the program including internships, clerkships, community studies, field studies, projects, or research.
- Courses' contact hours (theory and lab components).
- Major tracks/pathways
- Intermediate Exit Points and Awards
- Program Entry Requirements.
- Program Mission Statement
- Goals and Objectives
- Program Learning Outcomes
- Program Description (study plan) with all course codes, titles and weightage

- Program Textbooks.
- Reference Manuals.
- Location of Program.

The Approval units

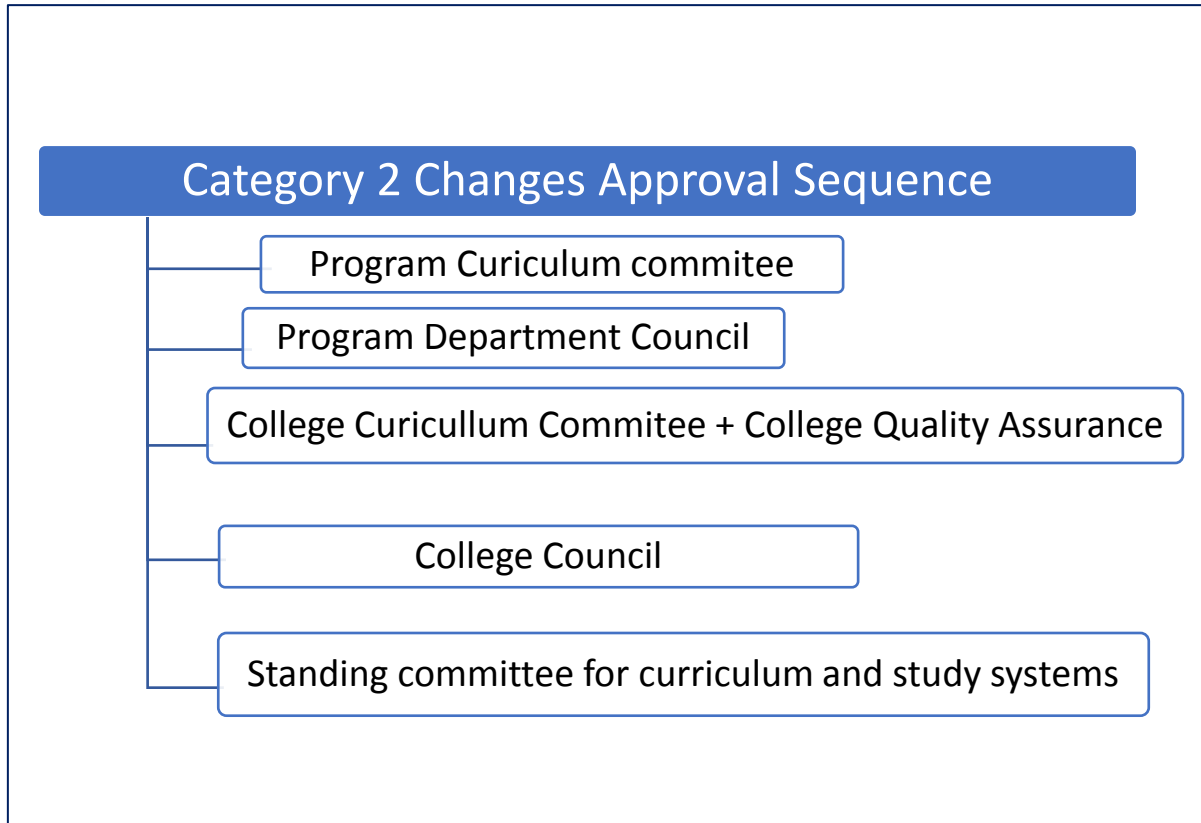


Category 2 Changes:

The list of changes that are categories as Category 2 are

- Program key performance indicators (KPI)
- Field experience
- When it occurs (stage in the program)
- Time allocation and scheduling arrangements
- Number of credit hours
- Number of credit hours of Project or research
- Courses learning outcomes.
- Programming learning outcome-courses mapping matrix
- Completion of the program requirements
- Professional occupations of the graduates of the program
- Course title and code
- Number of Credit hours of the course.
- Pre-requisites for the course
- Course components (Lab, Lecture, ..).
- Language of instruction.
- Program Evaluation improvement process.
- Overall Program Evaluation
- Student administration and support.
- Assessment & verification of standards.

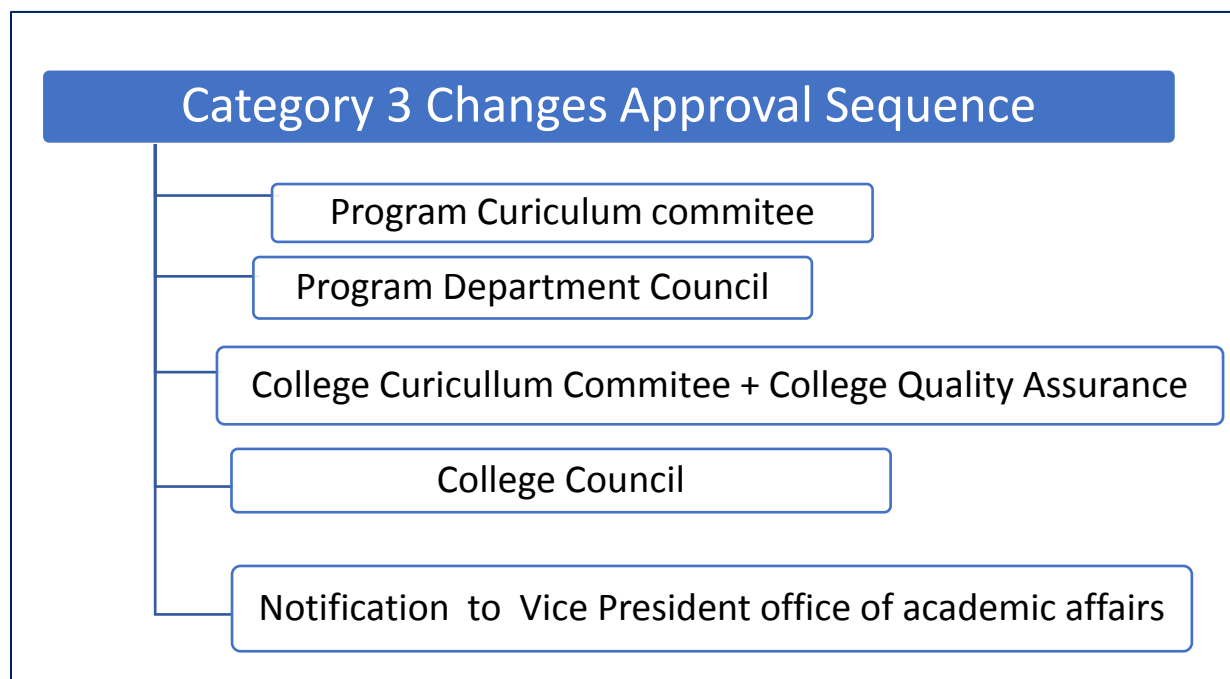
The Approval units



Category 3 Changes:

The list of changes that are categories as Category 3 are:

- Attendance and completion requirements.
- the main purpose for a course
- Course Description (Topics to be covered)
- Schedule of Assessment Tasks for Students during the Semester in the course. (Assessment tools of course and marks distribution).
- Electronic Materials
- Facilities Required
- Course Evaluation and Improvement Processes.



Policies of Development and Approval of New Academic Program

The development of new academic programs and approving process is given in details in *OMS-KFU, Page 32-39.* The process of developing new programs have three stages:

1. Planning and initial approval stage
2. Developing program contents stage: The required step to develop program contents
 - ✓ Study the market needs in detail: professions needed, knowledge and skills needed.
 - ✓ Defining the program name.
 - ✓ Defining the program NQF level (Diploma (5), Bachelor (6), Master (7), PhD (8).
 - ✓ Defining the admission requirements
 - ✓ Defining the program mission.
 - ✓ Defining the program goals.
 - ✓ Defining the program's graduate attributes: Defining Program Learning Outcomes.
 - ✓ Developing the program curriculum
 - Identifying the courses required to achieve the program learning outcomes.

- Identifying the program code and courses codes. The deanship of admissions and registrations must be asked to get the program code.
- Distribute courses into:
 - Institution Requirements
 - College Requirements
 - Program Requirements
 - Capstone Course/Project
 - Field Experience/ Internship (if exist).
- Developing Courses learning outcomes.
- Ensuring achieving of program learning outcomes by Developing course-learning outcomes – program-learning outcomes mapping matrix.
 - Developing the study plan (distribution courses into levels)
- ✓ Preparing the program specifications (PS, NCAAA Templates).
- ✓ Preparing the courses specifications (CS, NCAAA Templates).
- ✓ Preparing the field experience specifications (NCAAA Templates) (if exist).
- ✓ Benchmarking the curriculum with international and national similar curriculum.
- ✓ Reviewing the program by external academic reviewer.
- ✓ Reviewing the curriculum by external industrial reviewer

3. Final program approval stage.

Units/Committee	Responsibility
Curriculum Committee, Program	<ul style="list-style-type: none"> • Proposing the new program • Developing the program curriculum • Preparing the Program templates (Program specifications and course Specifications)
Quality and accreditation committee, Program	Ensuring that the program is developed according to national and international standards
Department Council	<ul style="list-style-type: none"> • Following the progress in developing the program • Approving the program
Curriculum committee, College	Reviewing the proposed program to ensure consistency of the program with national and international practices
Quality and accreditation committee, College	Reviewing the proposed program to ensure the consistency of program with quality and accreditation standards
College Council	Approving the proposed program
Standing committee for Curriculum and study systems	<ul style="list-style-type: none"> • Approving the initial program proposal. • Recommendation for approving the proposed program.
University council	Approving the proposed program

Table 3: Responsible committees/Units for developing new plan

Post Graduate Programs

With the expansion of many post graduate studies, KFU has established a separate deanship to monitor the development of post graduate programs and quality management. In college level, the vice dean of post graduate studies and scientific research is responsible to take care all the issue in this aspect. The quality practices in Master programs are almost similar as undergraduate programs. However, a special committee in the program monitor the activities related to the master courses. The details polices and procedure for approving, execution and periodic program review activities are clearly documented in the QMS- KFU, Page 112-119.

In college level all four programs follow unified practices for the master program:

List of the KPIs of all the MSc Programs and responsible committees

KPI No.	KPI	Responsible committee(college/program) , Vice-Deanship/program chair for core Data	Remarks	Responsible Committee (program level, except for KPI 7 & KPI 9) to receive/collect the data and prepare analytical report (Attached template)
KPI-PG-1	Percentage of achieved indicators of the program operational plan objectives	Strategic Planning Committee, College Note: Achievement data should be approved and provided by the College's Strategic plan committee	An annual achievement report highlighting the percentage achievement of the program operational plans during the previous academic year.	Operational Plan Committee, Program

KPI No.	KPI	Responsible committee(college/program) , Vice-Deanship/program chair for core Data	Remarks	Responsible Committee (program level, except for KPI 7 & KPI 9) to receive/collect the data and prepare analytical report (Attached template)
KPI-PG-2	Students' Evaluation of quality of learning experience in the program	Centre for the Measurement and Evaluation of KFU for conducting the program, experience, and course evaluation surveys, which are accessible by the Chairmen of the programs. Note: If the data is not readily available in online system, it is recommended that the program QAC/Chairman make a Shrek order on 15 th Week of 2 nd semester to CME for the survey data.	The Chairmen of the programs to provide the raw statistics data of the program, experience, and course evaluation surveys to the QAC of the programs, who will finalize the reports.	QAC, Program.
KPI- PG-3	Students' evaluation of the quality of the courses			
KPI-PG-4	Students' evaluation of the quality of scientific supervision	Vice dean Post-Graduate studies in association with program's Post-Graduated Committees Need to set up the evaluation system in this regard, if have not done yet	A survey should be done and the results (on scale 1-5) should be provided for both males and females.	Post-Graduate committee, Program
KPI-PG-5	Average time for students' graduation.	Post-Graduate committee, Program		

KPI No.	KPI	Responsible committee(college/program) , Vice-Deanship/program chair for core Data	Remarks	Responsible Committee (program level, except for KPI 7 & KPI 9) to receive/collect the data and prepare analytical report (Attached template)
KPI-PG-6	Rate of students dropping out of the program.		This should be provided for both male and female students separately.	
KPI-PG-7	Graduates' employability	Alumni Committee, College	This should be provided for both male and female students separately.	Alumni Committee, College
KPI-PG-8	Employers' evaluation of the program graduates' competency.	Labor Market Committee, College	This should be provided for both male and female students separately as the numbers.	Post-Graduate, Program
IKPI-PG-9	Students' satisfaction with the provided services.	Centre for the Measurement and Evaluation of KFU for conducting the program, experience, and course evaluation surveys, which are accessible by the Chairmen of the programs.	The Chairmen of the programs to provide the raw statistics data of the program, experience, and course evaluation surveys to the QAC of the programs, who will finalize the reports.	QAC, Program

KPI No.	KPI	Responsible committee(college/program) , Vice-Deanship/program chair for core Data	Remarks	Responsible Committee (program level, except for KPI 7 & KPI 9) to receive/collect the data and prepare analytical report (Attached template)
KPI-PG-10	Ratio of the Students to the faculty members.	Post-Graduate committee, Program	1. This should be provided for both males and females separately as the ratio. 2. The ratio should be based on PhD faculty members to students.	Post-Graduate committee, Program
KPI-PG-11	Percentage of faculty members' distribution based on academic ranking.	Recruitment and Human resources committee, Program	The male/female distribution ratio should be based on PhD faculty members.	Recruitment and Human resources committee, Program
KPI-PG-12	Proportion of teaching staff leaving the program.		This should be provided for both males and females separately as the numbers.	
KPI-PG-13	Satisfaction of beneficiaries with learning resources.	Post-Graduate committee, Program.	A survey should be done and the results (on scale 1-5) should be provided for both males and females.	Post-Graduate committee, Program.

KPI No.	KPI	Responsible committee(college/program) , Vice-Deanship/program chair for core Data	Remarks	Responsible Committee (program level, except for KPI 7 & KPI 9) to receive/collect the data and prepare analytical report (Attached template)
KPI-PG-14	Satisfaction of beneficiaries with research facilities and equipment.	Scientific Research Committee, Program	A survey should be done and the results (on scale 1-5) should be provided for both males and females.	Scientific Research Committee, Program
KPI-PG-15	Percentage of publications of faculty members		This should be provided for both males and females separately as a percentage. (Percentage of faculty members participating in the program with at least one research publication during the year to total faculty members in the program)	
KPI-PG-16	Rate of published research per faculty member.		This should be provided for both males and females separately as a number for the previous calendar year. (= total number of refereed and/or published research to the total number of faculty members during the year)	

KPI No.	KPI	Responsible committee(college/program) , Vice-Deanship/program chair for core Data	Remarks	Responsible Committee (program level, except for KPI 7 & KPI 9) to receive/collect the data and prepare analytical report (Attached template)
KPI-PG-17	Citations rate in refereed journals per faculty member.		This should be provided for both males and females separately as a percentage for the previous calendar year.	
KPI-PG-18	Percentage of students' publication.			
KPI-PG-19	Number of patents, innovative products, and awards of excellence.		This should be provided for both males and females separately as a percentage for the previous calendar year.	

Table 4: List of Post-graduate Program KPIs and Responsible units

Other Important Reports/Tasks related with MSc Program.

No.	Reports/Items	Responsibility	Remarks
1	Student's Cohort Analysis Report	Vice-Dean of Post-Graduate studies & Vice-Dean Quality Assurance Committee, College (For Cohort data)	The College Vice-Dean of Post-Graduate studies should arrange the appropriate cohort data for the previous academic year and share with the program's QACs.
2	PLOs Assessment Report	Post-Graduate studies Committee, Program Note: The report should be as per assessment plan and as per due date of each semester prescribed by DDQA.	A combined PLOs assessment report for the previous academic year, clearly providing the details for both male and female student's performance separately.
3	Annual Program Report	Post-Graduate studies Committee, Program	NCAAA prescribed format
3	Program Specifications and Course Specifications modifications/update/revision as per requirement	Post-Graduate studies Committee, Program	This task is subject to requirement or notifications from DDQA or NCAAA or program's development requirements.
4	Moderation of Exam Grades (only Final Exam)	Post-Graduate studies Committee, Program Each semester during 16 th - 18 th Week	Execute the process by distributing blank template before exam and collect the filled report after exam, and prepare a concluding report (only if the final exam is offline)
5	Verification Exam Question (only Final Exam)	Post-Graduate studies Committee, Program, Each semester during 15 th -17 th Week	Execute the process by distributing blank template before exam and collect the filled report and prepare a concluding report.

Important Web Links

- KFU- <https://www.kfu.edu.sa/Sites/Home/>
- CoS- <https://www.kfu.edu.sa/ar/Colleges/Science/Pages/Home-new.aspx>
- DDQA- <https://www.kfu.edu.sa/ar/Deans/OA/Pages/Home-new.aspx>
- Templates- <https://www.kfu.edu.sa/en/deans/qa/pages/progtam.aspx>
- QMS-KFU- <https://mportal.kfu.edu.sa/ar/Deans/OA/Documents/qms/QMS-2020-3.pdf>
- NCAAA- <https://etec.gov.sa/ar/About/Centers/Pages/Accreditation.aspx>
- DSA- <https://www.kfu.edu.sa/en/deans/ahsaastudent/pages/home-new.aspx>
- DFA- https://www.kfu.edu.sa/en/Deans/Faculty_Affairs/Pages/Home-new.aspx
- DLA- <https://www.kfu.edu.sa/en/Deans/Library/Pages/Home-new.aspx>
- DPS- <https://www.kfu.edu.sa/en/Deans/HigherStudies/Pages/Home-new.aspx>
- DSR- <https://www.kfu.edu.sa/en/Deans/Research/Pages/Home-new.aspx>
- DIT- <https://www.kfu.edu.sa/en/deans/it/pages/home-new.aspx>

Reference

QMS- KFU: [*Quality Management System \(V2\), King Faisal University*](#)

Contacts

Please do not hesitate to contact us and help you at any issues inside or outside college. It is our pleasure to share and help you to reach your success and achievements. Below link would provide you with Dean, Vice-deans, Head of departments. Web:

https://www.kfu.edu.sa/ar/Colleges/Science/Pages/Section_4.aspx

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