



# College of Sciences and Humanities

## Quality Management System - Mathematics

2022

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### 1. Introduction

#### 1.1 Academic Quality Management System

Quality Assurance and Management is an integral part of any Organisation – academic institutions are no exceptions to it. In fact, all academic institutions must have an effective Quality Assurance System as they have the responsibility of grooming the youth to be contributing member of the society. Prince Sattam Bin Abdulaziz University, being an Accredited Educational Institution, has an effective Quality Management System in place to achieve the Kingdom’s Vision 2030.

Mathematics, being an integral part of STEM curriculum and the Bachelor Program in Mathematics being one of the oldest Programs of PSAU adheres to the guidelines of the Academic Quality Management System designed by PSAU and strives hard to achieve effective academic standards.

QMS of Mathematics program is aimed to ensure the following:

- (a) Adoption of Regulation, Policy and Procedures given out by the Apex bodies such as Higher Education Council, PSAU.
- (b) Fulfilling all the academic requirements with regard to the Curriculum development, Program delivery and Review as envisaged in the National Qualification Framework (NQF)

- (c) To obtain the feedback and consider the level of satisfaction from various stakeholders – student, faculty, staff, employers etc., with regard to all offered services including but just not limited to Program delivery.
- (d) To ensure that the review and development process is continuous and ongoing.

## 1.2 Terminology

<b>Accreditation</b>	Formal verification by a recognized authority that a program or an institution meets required standards.
<b>Assessment</b>	A process of measuring performance in relation to established standards or criteria.
<b>Course</b>	A self-contained unit of study on a particular topic, with defined level, credit value, aims, intended learning outcomes, mode(s) of delivery, scheme of assessment, and possibly also pre- and co-requisites
<b>Evaluation</b>	The process of assessing and assigning value to a facility or activity.
<b>Internal Quality Assurance</b>	Processes of quality assurance carried out within and by or for a higher education institution.
<b>Learning Outcomes</b>	The term learning outcomes is commonly used to refer to the learning that results from a course or program undertaken by students. Learning outcomes are the result of

the teaching process. Reference is often made to Intended Learning Outcomes to mean the learning objectives a course or program is designed to develop.

<b>Program</b>	A coherent course of study followed by students in an academic or professional field or leading to a professional qualification, the successful completion of which qualifies them for an academic award.
<b>Qualification</b>	The formal outcome of an assessment and validation process which is obtained when a competent body determines that an individual has achieved learning outcomes to given standards.
<b>Quality</b>	The value, worth, or standard of an institution or program in relation to generally accepted standards for an institution or program of its type.
<b>Quality Assurance</b>	Processes and procedures for ensuring that qualifications, assessment and program delivery meet quality standards. The activities that aim at safeguarding quality.
<b>Standards</b>	Specifications and criteria which detail prescribed outcomes for qualifications or qualification institutions.
<b>Self-evaluation</b>	The process of systematically observing, analyzing and improving one's own actions or results. Self-evaluation takes place at an individual level, but also at a department or organizational level.

**Self-Study Report** It considers inputs, processes and outcomes, and these are all incorporated in the six accreditation standards. The most important of these considerations, and the ultimate test of the value of a program, is what students have learned and can do as a result of participating in it. Consequently, special attention should be given to student learning outcomes, including standards of student achievement and how these standards are directly measured and verified.

**Key Performance Indicators** They are important tools for assessing the quality of Academic Programs and monitoring their performance. They contribute to continuous development processes and decision-making support.

**Stakeholders** In higher education can be described as either internal or external. Internal stakeholders are members of the academic community, ‘those who participate in the daily life of institutions. This includes faculty and non-academic (or professional or general) staff, managers, students and the institution itself as an entity expressed through its leadership and formal governance.

External stakeholders are ‘groups or individuals that have an interest in higher education’ but who are not internal stakeholders. External stakeholders include employers; parents; society at large, including non-consumers of education; the government, as represented by its various agencies; and organizations or groups representing collections of such stakeholders, nationally and internationally.

### 1.3 About the program

The Department of Mathematics (DoM) in the College of Science and Humanities at Al Kharj was established in the year 1426H (2005G) and is offering the Program in Mathematics since then. Following the formation of Prince Sattam bin Abdulaziz University (PSAU) at Alkharj by Royal Decree w.e.f 01.01.1430, College of Science and Humanities and all its departments got affiliated to PSAU, Alkharj.

As a department in an affiliated college of a newly established university, the Department at was offering Bachelor's Degree Program in Mathematics, which is a four-year academic program. However, the department started Master Degree Program in Mathematics from AY 1439-1440 and the first batch of Master Students are expected to graduate in the AY 1443. The graduates of the Mathematics Program are not only eligible to pursue Graduate Program in Mathematics leading to Research, but also have professional job opportunities in various sectors such as Secondary Education, Dept of Finance, Statistics, Actuarial Science, IT, Management to name a few.

The academic and administrative affairs of the Department is led by a qualified and experienced Head of Department (HoD). He is assisted and supported by a council of qualified and experienced faculty members, recruited from various countries.

Furthermore, the Department of Mathematics offers its services to teach Mathematics courses in other Programs offered by various Faculties/Departments of PSAU, including the Preparatory Year Program.



## 2. Program Mission and Objectives

### **Mission**

Provide a stimulating academic environment for education and research in various branches of mathematics and its applications to serve the labour market and

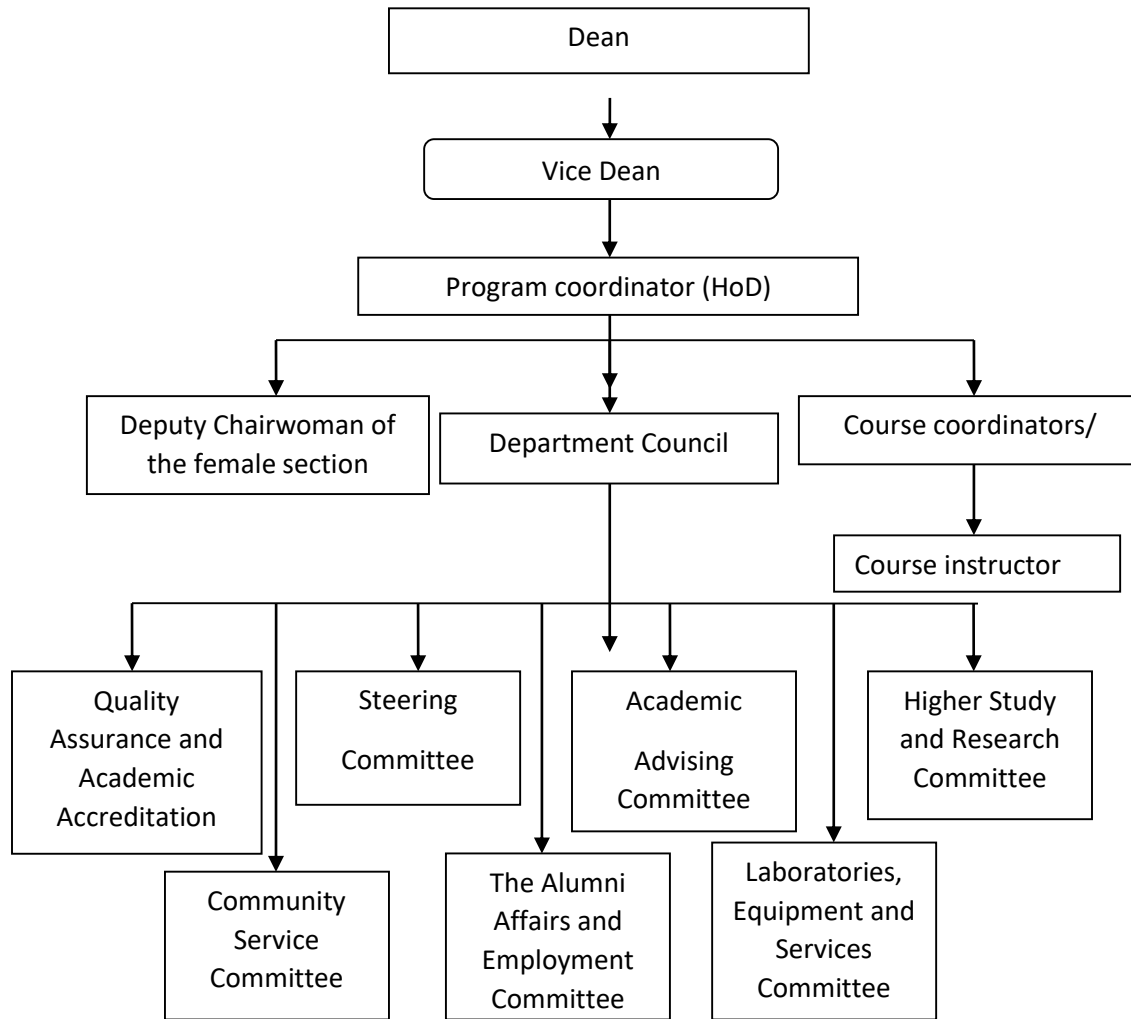
community inculcating human values among students thus producing well qualified and competent graduates as per national and international standards

### **Objectives**

1. To provide Quality Education in Mathematics that is relevant to present day changes and challenges and comparable with similar programs offered by Universities of national and international repute.
2. To develop the logical and analytical thinking, quantitative reasoning and problem-solving skills of the students
3. To prepare the students to take up graduate programs and research in mathematics
4. To prepare the students to become eligible for professions having minimum eligibility as graduation
5. To provide adequate facilities for proper teaching and learning of mathematics
6. To prepare the students to serve the society socially as well as economically

### **3. Program Structure**

The Program is administered in line with the following hierarchy:



## 4. Responsibilities at all Organizational Structure Levels

### a) Responsibilities of the Department Head

- 1- Implementing the decisions of the University Council and the College Council in relation to the department.
- 2- Presiding over the department council and following up on the implementation of its decisions after their approval.
- 3- Preparing a comprehensive periodic report on the progress of work in the department and its educational affairs and other aspects. The activity and needs of the department, and submitting this to the dean of the college.
- 4- Suggesting plans for developing the academic performance of the department and submitting to the Dean of the College after approving in the Department Council.
- 5- Suggesting study schedules, distributing lectures, and exam schedules for the department to which he belongs. and submit it to the College Council after the approval of the Department Council in accordance with Article (43) of the Council's bylaw Higher education and universities and its implementing regulations.
- 6- Approving the proposals received from various subcommittees for submission in the Department Council and then submitting it to the College Council along with the minutes thereof.
- 7- Supervising the academic advising process for students in the department and following up on the progress of studies in it. Suggesting academic advisors, in coordination with the relevant authorities.
- 8- Suggesting the numbers and special conditions for admission to the scientific department, according to the absorptive capacity and raising it to the dean of the college after being presented to the department council.

- 9- Approval of the final results of various courses offered by the department.
- 10- Preparing Performance Appraisal Reports and other confidential reports in respect of faculty members and the like, and administrative staff and submit it to the dean of the college.
- 11- Recommending the granting of emergency and regular leave and other statutory leave to all Saudi and non-Saudi faculties, lecturers, teaching assistants, technicians and employees, the department's administrators, employees and workers, and submit it to the Dean of the College for approval and further action.
- 12- Forwarding of Joining Report of the Faculty members and staff returning from vacation.
- 13- Following up on the department's various needs and write them to the Dean of the College.
- 14- Forwarding of Scholarship Requests of Teaching Assistants for Higher studies overseas and monitoring their progress and reporting the same to the Competent Authority.
- 15- Any other duties assigned by the Vice Dean / Dean of the College.

**b) Responsibilities of the Department Council**

- 1- Approving the department's strategic plan in line with the strategic plans of PSAU and College of Science, some of which are:
  - a) Scientific Research
  - b) Academic Programs.
  - c) Application of Quality Standards
  - d) Graduate education.
  - e) Academic Advising and Student centric activities.
  - f) Scholarship and training for faculty and staff.
- 2- Discussing the directives received from the College and University and planning their implementation

- 3- Approving the proposals received from various subcommittees of the Department and forwarding to the College council.
- 4- Approving requests received from TAs and Lecturers with regard to the award of Scholarship for Higher Studies overseas such as admission, university rank, Review of Progress, Extension or discontinuation, Termination and any other matter in this regard and forwarding to the Competent Authority.
- 5- Approving the appointment of faculty members, teaching assistants, and lecturers, and their renewal, assignment, and promotion.
- 6- Approving the teaching load of the faculty members.
- 7- Considering and recommending Sabbatical Leave requests as set out by the Faculty and Employees Leave Rules of PSAU.
- 8- Recommending the approval of the faculty member's work as a part-time advisor, or its renewal. In government agencies, the private sector, or regional or international organizations.
- 9- Approving the request of the faculty members for participation in conferences and seminars that are held inside or outside the Kingdom after consideration.
- 10- Recommending the employment of non-Saudi faculty members who have exceeded the upper age limit.
- 11- Approving the request of a faculty member to attend a conference or scientific symposium.
- 12- Approving the transfer of a faculty member and the like to and from the department.
- 13- Recommending to grant the part-time professor a reward equivalent to the first peg of the scientific rank he was in. If he is not a former faculty member, the University Council determines the amount of the reward, including: The first tied does not exceed the rank of assistant professor.
- 14- Recommending the use of non-employees of distinguished Saudi competencies from outside the university. to do teaching.

- 15- Recommending the assignment of a faculty member and the like to work for government agencies.
- 16- Recommending the extension of the services of a faculty member and the like.
- 17- Recommendation to send a faculty member on a scientific mission outside the university premises.
- 18- Recommendation to send a faculty member to teach outside the kingdom.
- 19- Recommendation to allow a faculty member to travel to conduct research at a university other than his own during the period. summer vacation.
- 20- Considering the promotion of a faculty member, and the nomination of no less than a number of specialized arbitrators. Their number is about eight.
- 21- Approval of the equivalency of the courses that the student studied outside the university, according to the executive rule. Article (42) of the study and examination regulations for the undergraduate level.
- 22- Recommending the student to study courses if the student has completed the courses required for graduation. But his total grade was less than (2).
- 23- Approval for the student to complete the requirements of any course in the following semester based on the subject's teacher's recommendation in accordance with Article (25) of the Regulations for Study and Examinations for the Undergraduate Level.
- 24- Approval of the course reports, the annual report of the program and the self-study of the program.
- 25- Setting the controls for admission and transfer to and from the department.
- 26- Suggesting the number of students who will be accepted annually.
- 27- Setting the regulations for conducting them. Proposal to determine the degree of the semester work between internal and final mark allocations/distributions.
- 28- Consideration of all proposal regarding conduct of Exams and the Evaluations.
- 29- Recommending to add/modify conditions for admission to the master's or doctoral stages.

- 30- Recommending the admission of students to study a master's degree or a doctorate in a field other than his field of specialization
- 31- Considering all applications regarding transfer students, transfer of credits etc.
- 32- Considering all matters pertaining to Master Thesis – such as Supervising Limit for a faculty member, Validation of Thesis, Formation of Defence Committee etc.
- 33- Recommending to identify the supervisor of the student's thesis in postgraduate studies.
- 34- Encouraging the preparation of scientific research.

### **c) Responsibilities of the Committees**

#### **1. Quality Assurance and Academic Accreditation Committee**

- 1. Spreading the culture of quality in the department.
- 2. Preparation and review of Program Specification and Course Specifications and submitting to the Department Council for its approval
- 3. Review of courses files (Portfolios).
- 4. Review the updating of the files of community service, scientific research and department alumni, and confirm the inclusion of any new activities.
- 5. Preparation of the Annual Program Report.
- 6. Formation of subcommittees for easing the Self Study Process of the Program
- 7. Update the Self Evaluation Scales for the program at both faculty branches (males and females).
- 8. Drafting and review of the Self Study Report (SSR) for the program at both faculty branches (males and females) and submission for consideration and approval of Competent Authority.
- 9. Preparing and processing the academic accreditation files of the program.



10. Follow up the recent publications of the National Commission for Academic Accreditation and Assessment.
11. Placing request for Accreditation from Accrediting Agencies through Competent Authority.
12. Coordinating the meetings of the accreditation team with members of the faculty staff and students in the department.
13. Supervising the evaluation and academic accreditation activities of the department.

## 2. Steering Committee

- 1-Preparing a strategic plan for the department based on the reality of the college and the university and the needs of the community and the modern directions of planning.
- 2-Updating the vision, mission and objectives of the department in accordance with the vision of the college and the university, their mission and strategic plan.
- 3-Provide advice and suggestions on improving academic and administrative performance within the department.
- 4-Introducing the strategic plan of the department and dissemination of its objectives and components.
- 5-Supervising the implementation of the department's strategic plan.
- 6-Supervising the development plans of the department.

## 3- Academic Advising Committee

- 1-Raising awareness of the importance of academic advising for the department's program.
- 2-Emphasize the concept of academic advising and the role of academic advising in guiding students to plan for their educational future.
- 3-Help students solve their academic problems.

- 4-Referral of the academic problems of the competent authority (such as: re-registration of student who have dropped out of school - separated from academia - problems of denied students – excuses of absent students from the final exams).
- 5-Develop a proposed plan to serve students who are failing the plan.
- 6-Follow up on receiving students' complaints and responding to their suggestions.
- 7-Follow up the preparation of the necessary questionnaires for academic accreditation regarding academic advising.
- 8-Deepening trust between students and faculty members.

#### **4- Laboratories and Instrumentation Committee**

- 1- Hold periodic meetings with concerned authorities to develop time plans for the development of the equipment and laboratories to achieve the objectives of this committee.
- 2- Investigate and evaluate the current state of all devices and laboratories, and scheduling start-up of development processes.
- 3- Ensure that all lab equipment and student services are available for all programs offered by the department.
- 4- Ensure availability of plans for the maintenance of equipment and student services.
- 5- Provide a periodic report to the head of the department at the end of each year to make the necessary work on proposals.
- 6- Supervising the availability of guidance procedures for security and safety procedures in laboratories and study halls.
- 7- Raise awareness, prepare guidance publications on safety and safety measures for different risks, and distribute them to students at the beginning of the study year.

- 8- Prepare questionnaires to measure the satisfaction of the beneficiaries of the equipment and laboratories.
- 9- Discuss the preliminary results with the Quality Committee and present proposals and solutions.
- 10- Recommending the application of the required programs, equipment and accessories in each laboratory in accordance with the specialization of the subjects being taught.
- 11- Coordinating with the competent authorities regarding the technical support of the devices.

#### **5- Alumni Affairs Committee**

- 1- Building the databases of graduate students.
- 2- Building the databases of the target parties in the employment of graduates
- 3- Studying the job market and its relation to the practical disciplines and programs required.
- 4- Develop a mechanism to contribute to the qualification and development of graduates to join the labor market
- 5- Activate communication with the graduates of the department and benefit from their experiences.
- 6- Coordinating with the alumni affairs department at the college and the university.
- 7- Presenting the success stories of some graduates in various fields.
- 8- Organizing the annual alumni forum.
- 9- Create a webpage for alumni on the department and college websites so that the graduates can register data and communicate with the department.
- 10- Announcing the innovative and distinguished programs of graduates, which serve the community and the university.

### 6- Field Training Committee

- 1- Coordinating with the college administration to provide opportunities for field training for students.
- 2- Proposal to form a committee to evaluate the student's final report and approve it from the department council.
- 3- Follow up the training places through the academic advisor of the student so that the student can perform:
- 4- The connection between the theoretical and practical aspects.
- 5- Development of scientific skill in the field of specialization.
- 6- Deepening the student's ethics and behavior at work, during the training period through discipline and punctuality, responsibility and teamwork.
- 7- Enable students to demonstrate their scientific and practical abilities, which may allow them to employ in the same training place or be nominated in other places.
- 8- Enable students to develop their abilities by analyzing strengths and weaknesses during the training period.

### 9-Time Table Committee

- 1- Work on the preparation of study schedules to be delivered in a timely manner.
- 2- Review the teaching loads of faculty members.
- 3- Distribute the department's courses to the allocated halls.
- 4- Coordination between departments to achieve proportionality between the capacity of the hall and the number of students per course.
- 5- Follow up the announcement of the classrooms timetables on the halls assigned to the department.

### 10- Exams Committee

- 1- Prepare the final exam schedule.

- 2- Ensure that the classrooms are equipped with chairs, lighting, and air conditioning.
- 3- Distribution of halls and controls in the final exam's schedules.
- 4- Follow up the final exams, including:
  - a) Follow-up attendance of exam supervisors and provide alternatives in case of emergency.
  - b) Receiving questions and lists of students from the professors of the course and handing them over to the committees.
  - c) Receiving of exam answer sheets papers and the signatures lists from the exam committees and delivering to the course instructors.
  - d) Provide a daily report on the progress of the final exams.
  - e) Recognition of denied students and ensuring they have no access to the relevant exam.
  - f) Arranging halls and seating according to the number of students per course.
  - g) Raise student issues (request for alternative exams - cases of cheating ... etc.) to the relevant committees.
  - h) Preparation of the final exam report.

### **11-Scientific Research Committee**

- 1- Monitoring of research projects within the department for various fields.
- 2- Prepare a research plan that considers the research interests and trends of the department faculty members in coordination with the college.
- 3- Implementation of scientific research programs and policies in the department.
- 4- Encouraging scientific research that meets the needs of the job market, and opening channels of communication with those wishing to benefit from the services of faculty members.

- 5- Working to raise the research skills of the department faculty members through specialized courses and lectures.
- 6- Searching for graduate programs that meet the needs of Vision 2030 of the Kingdom of Saudi Arabia.
- 7- Implementation of the research partnership between the members of the department and the college, and other faculties inside and outside the university.
- 8- Prepare and follow up the scholarships file in the department.
- 9- Receive proposals for research seminars and arrange their schedule each academic year, with approval by the department.

### **12- Disciplinary Committee**

- 1- Guide students in some academic issues that are difficult for students to deal with.
- 2- Follow students' behavior and solve behavioral problems that could be an obstacle to their educational process.
- 3- Communicate with the guardians of students who commit academic or behavioral violation in order to inform them with the conditions those students.

### **13- Community Service Committee**

- 1- Develop a proposal plan for the community service.
- 2- Document the relationship of the department with the external community and work to identify and meet its needs.
- 3- Encourage the spirit of initiation among faculty members and similar positions, along with students (males and females) to participate in community service.
- 4- Follow up the implementation of programs and writing reports.

- 5- Evaluate the community service programs and work on developing them.
- 6- Document all department work related to community service.
- 7- Dissemination of the achieved community service work through the social media and the websites of the department, college and university's newspaper.
- 8- Writing the annual report of the department's activities.

#### 14- Graduation Project Committee

- 1- Making awareness and introductory seminars on graduation projects for seventh-level students.
- 2- Receive the titles of the proposed projects from the faculty in the department and choose the appropriate ones and approve them by the department board, choose discussion committees and put.
- 3- Supervising project discussions, ensuring that the deliberate standards and models of the department are applied and raising a report to the head of the department. Carry out other tasks assigned to the committee.

## 5. Standards and Criteria Program Adopted

### 5.1 Standards (1) (Mission and Goals)

#### 5.1.1 Standards (1) Criteria:

Criteria	
1-0-1	The program has a clear, appropriate, approved and publicized widely mission that is consistent with the mission of the institution and the college/department; and is consistent with the needs of the society and the national trends.
1-0-2	The program goals are linked to its mission, consistent with the goals of the institution/college, and characterized by being clear, realistic and measurable.
1-0-3	The program mission and goals guide all its operations and activities (e.g., planning, decision-making, resources allocation, curriculum development).
1-0-4	The program goals and its implementation needs are linked to appropriate operational plans that are consistent with the institution/college plans.
1-0-5	Program managers monitor the extent to which its goals are achieved, through specific performance indicators, and take the necessary actions for performance improvement.
1-0-6	The program mission and goals are reviewed periodically with the participation of relevant stakeholders and are developed accordingly.



**5.1.2 Standard (1) Procedures**



**5.1.3 Standard (1) Activities:**

**Procedure 1: Preparing Program's Mission and Goals**

- The quality committee / program coordinator prepares a proposed format for the program's mission and goals.
- Taking feedback on the proposal from internal and external stakeholders.
- Preparing the initial copy of the program's mission and goals and submitting it to the department council.
- Discussing the proposed formula in the department council and recommending sending it to the faculty's Development and Quality Council/Unit.
- The quality committee / program coordinator prepares the second copy of the program mission and goals according to the views of the Quality and Development Unit / Council college.
- Obtaining approval from the department council.
- Obtaining the approval of the concerned vice dean of the college.
- To approve the letter from the College Council.

### **Procedure 2: Reviewing and Updating the Program's Mission and Goals**

The program mission and goals are reviewed every 4 years by following the following steps:

- The quality committee/program coordinator reviews the program's mission and goals formula according to the internal and external variables and the future directions of the university/college/department.
- Preparing a proposed copy of the updated version of the program's mission and goals (the previous version) with justifications and reasons.
- Preparing the initial copy of the program's mission and goals and submitting it to the department council.
- Taking feedback on the proposal from internal and external stakeholders.
- Discussing the proposed formula in the department council and recommending sending it to the faculty's Development and Quality Council/Unit.

- Preparing the second copy of the program's mission and goals according to the visions of the College's Development and Quality Council/Unit.
- Obtaining approval from the department council.
- Obtaining the approval of the concerned vice dean of the college.
- Approval of the mission and goals from the college council.

**Procedure 3: Publication of Program's Mission and Goals**

- The quality committee/program coordinator preparing a design for the program's mission and goals.
- Preparing a plan to disseminate and raise awareness of the program's mission and goals.
- Implementation of the advertising plan
- Preparing a periodic report.

**Procedure 4: Program's Mission and Goals are consistent with all its operations and activities:**

- The consistently form is completed with each topic represented to the department council.
- The department council secretary makes sure that the department council topics are related to their mission and goals according to the form.
- The decisions of the councils concerned with the program are linked to its mission and goals according to the program's operational plan.
- Preparing a periodic report on the extent of consistency and coherence of the operations and activities of the competent council with the program's mission and goals.

**Procedure 5: Evaluation and Benchmarking:**

- Key Performance indicators are defined about the program's mission and goals.

- Periodic measurement of the adopted KPIs.
- Comparisons with internal and external benchmark are done.
- Preparing a periodic report and developing plans for improvement and development the program's mission and goals.

## 5.2 Standard (2) (Program Management and Quality Assurance)

### 5.2.1 Standard (2) Criteria:

Criteria	
2-1	<b>Program Management</b>
2-1-1	The program is governed by specialized councils (College Council, Department Council) with defined tasks and authorities.
2-1-2	The program leadership has the appropriate academic and administrative experience to achieve its mission and goals.
2-1-3	The program has the sufficient number of qualified staff to perform its administrative, professional and technical tasks, and they have defined tasks and authorities.
2-1-4	The program management acts to provide an organizational climate and supportive academic environment.
2-1-5	There are appropriate mechanisms for integration and effective participation among branches offering the same program.
2-1-6	The program is committed to applying the institutional regulations governing the educational and research partnerships (if any) in order to ensure the quality of all aspects of the program, including courses, educational resources, teaching, student achievement standards, and offered services.
2-1-7	The program assesses the effectiveness of its educational and research partnerships (if any) on a regular basis and makes appropriate decisions accordingly.

2-1-8	The program management monitors its commitment to implement its role in the community partnership plan of the institution through specific performance indicators.
2-1-9	The program management monitors its commitment to implement its role in the research plan of the institution through specific performance indicators.
2-1-10	There is a sufficient amount of flexibility and authorities that allows program leadership to bring about the necessary development and changes, in response to the recent events and to the results of periodic evaluation of the program and its courses.
2-1-11	The program management applies mechanisms ensuring integrity, fairness, and equality in all its academic and administrative practices, and between the male and female student sections and branches (if any).
2-1-12	The program forms an advisory committee, comprised of members of professionals and experts in the program specialization, to contribute to its evaluation, development, and performance improvement.
2-1-13	The program management is committed to developing and improving professional skills and capabilities of the supportive technical and administrative staff to keep up with modern developments.
2-1-14	The program management provides reliable and publicly disclosed information to the community about the program description, performance, and achievements that suits the needs of the stakeholders.
2-1-15	The program management encourages the developmental initiatives and proposals.
2-1-16	The program implements an effective system to evaluate the performance of leaders, teaching staff, and employee according to clear, published standards and mechanisms that ensure fairness, transparency, and accountability; and the results of the evaluation are used to provide feedback, improvement, and development.
2-1-17	The program management is committed to activating the values of the scientific integrity, intellectual property rights, rules of ethical practices, and proper conduct in all academic, research, administrative, and service fields and activities.

2-1-18 The program management applies the systems, regulations, and procedures that are approved by the institution/college, including those related to grievance, complaints, and disciplinary cases.

2-1-19 The program has adequate financial funding to achieve its mission and goals, along with existence of mechanisms for prioritizing expenditures.

**2-2 Program Quality Assurance**

2-2-1 The program management implements an effective quality assurance and management system that is consistent with the institution quality system.

2-2-2 The teaching staff, employee, and students participate in planning, quality assurance, and decision-making processes.

2-2-3 The program management approves key performance indicators that accurately measure the program performance and coordinates to provide regular data on them.

2-2-4 The program analyzes the evaluation data annually (e.g., performance indicators and benchmarking data, student progress, program completion rates, student evaluations of the program, courses and services, views of graduates and employers); and results are used in planning, development, and decision-making processes.

2-2-5 The program conducts a periodic, comprehensive evaluation (every three / five years) and prepares reports about the overall level of quality, with the identification of points of strength and weakness; plans for improvement; and follows up its implementation.

**5.2.2 Standards (2) Procedures:**



### 5.2.3 Standards (2) Activities:

#### Procedure (1): Program Management:

- The program managers are selected through a rigorous selection process of PSAU and after selection are appointed by the Competent Authority initially for a fixed term, which is extendable there after based on their performance.
- The duties and responsibilities of the Program Managers are clearly outlined by the PSAU and the Higher Education Council and are notified from time to time
- A Hierarchical (Pyramidal) Organizational structure is in place to oversee all activities relating to effective Program Delivery, well defined roles and responsibilities.
- At the department level, the Head of the Department is the Program Coordinator. He is assisted by the Department Council.

- At the beginning of every academic year, the Department Council nominates members for various Sub Committees with specific terms of reference for maintaining an academic environment for effective program delivery.
- Program Coordinator /Department council looks into various aspects of course / program delivery across branches such as adherence to the lecture plan as specified in course specification, executing common assessment plan across all branches (both direct and indirect)
- The senior management encourages participation of faculty members in active research by giving various incentives from time to time
- The faculty members are encouraged to have research collaboration (domestic as well as international) through the Deanship of Scientific Research
- A committee has been formed by the department council to look after the research activities of the program / department, which organizes periodical meetings /seminars to facilitate exchange of research findings among faculty members.
- The Program Management reviews the curriculum and study plan periodically and suggest such modifications so that the curriculum is at par with similar programs offered nationally as well as internationally
- Department council, among its members, nominates senior faculty members having varied administrative experience apart from teaching for a Steering Committee, which advises the HoD / Dept Council or any other subcommittee of the department, for an effective Program Administration and Program Delivery
- The Program Management encourages the Teaching Assistant, Staff to enhance their academic and technical qualification by recommending to the approval of the Competent Authority
- The sub committees which are entrusted with various aspects of program delivery submit their reports at the end of each term and suggest improvement



plans which are considered by the Dept. Council and after deliberations forwarded to the Competent Authority for their consideration

- An effective Performance Appraisal System is in place as envisaged by the PSAU and is implemented by the Program Coordinator and Program Administrators uniformly.
- The Program Management procures all such accoutrements for an effective program delivery.

**Procedure (2): Program Quality Assurance:**

- The Department Council nominates members for Quality Assurance and Academic Accreditation committee (QAAAC) with specific terms of reference
- The QAAAC in consultation with the faculty members and other stake holders drafts the program specification which outlines the graduate attributes of the program, intended learning outcomes so that the graduate possess the desired attributes as per the NQF standards.
- The faculty and staff are consulted from time to time by the Program Management through Department Council and Sub Committee Meetings and the recommendations are considered by the competent authority.
- A group of faculty members prepares the course specifications with specific objectives, intended learning outcomes, teaching strategies and assessment methods, required resources etc., which is reviewed by the QAAAC before submitting to Dept. council for its consideration and approval.
- The PS and CS are forwarded to the DDQ for its approval, through the committee formed at college level.
- The program evaluates its progress to achieving its mission and goals through Key Performance Indicators (KPIs) given out by NCAAA. The program can

also have its own KPIs. The Program evaluates all the KPIs given by NCAAA in each program cycle.

- At the end of each semester the course coordinators submit the course reports analyzing the achieved results, effectiveness of teaching strategies, suggestion for improvement and an action plan for future
- The students are contacted periodically by QAAAC and Academic Advisers regarding the course delivery apart from Class room observation done by Program Management
- QAAAC of the department conducts different types of surveys to ascertain the satisfaction level of stake holders with regard to various aspects of Course / Program (such as course evaluation, program evaluation, alumni survey, employer survey, faculty member survey etc)
- At the end of each academic year, the QAAAC prepares a consolidated Program Annual Report evaluating the results achieved and the Program KPIs with reference to the Mission and Goals of the Program and submits the report to the Department Council for its consideration and approval.
- The QAAC conducts a periodical self-study of the Program Delivery with reference to the standards given out by the NCAAA and prepares a self- study report and forwards to the Accreditation Agency through proper channel for getting the program accredited.

### **5.3 Standard (3) (Teaching and Learning)**

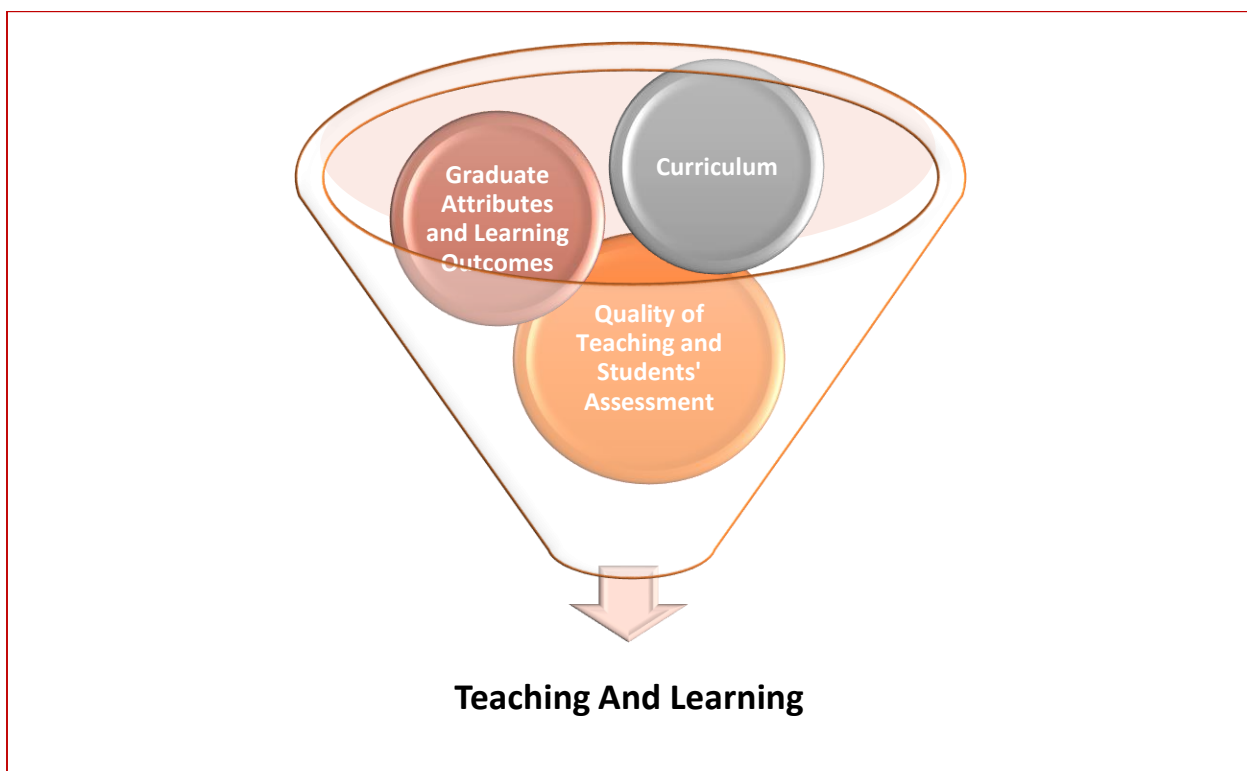
#### **5.3.1 Standard (3) Criteria:**

Criteria	
<b>3-1</b>	<b>Graduate Attributes and Learning Outcomes</b>
3-1-1	The program identifies its graduate attributes and intended learning outcomes that are consistent with its mission, and aligned with the graduate attributes at the institutional level; and they are approved, publicly disclosed, and periodically reviewed.
3-1-2	The graduate attributes and learning outcomes are consistent with the requirements of the National Qualifications Framework (NQF) and with academic, professional, and labor market requirements.
3-1-3	The program identifies the learning outcomes for the different tracks (if any).
3-1-4	The program applies appropriate mechanisms and tools for measuring the graduate attributes and learning outcomes, and verifying their achievement according to specific performance levels and assessment plans. *
<b>3-2</b>	<b>Curriculum</b>
3-2-1	The program is committed to the institutional policies, standards, and procedures in the design, development and modification of the curriculum.
3-2-2	The curriculum design considers fulfilling the program goals and learning outcomes, and the educational, scientific, technical and professional developments in the field of specialization; and is periodically reviewed.
3-2-3	The study plan ensures the balance between the general and specialty requirements, and between theoretical and applied aspects; and it takes into account the sequencing and integration of the courses.
3-2-4	The construction of the program study plan considers the identification of exit-points requirements (if any).
3-2-5	The program study plan considers the adequate requirements for the different tracks (if any) in accordance with international practices and similar programs.
3-2-6	The curriculum includes integrated curricular and extracurricular activities that contribute to the achievement of the program learning outcomes.
3-2-7	The learning outcomes in the courses are aligned with the program learning outcomes (e.g., Matrix for the alignment of the learning outcomes of the courses with program learning outcomes).

3-2-8	Teaching and learning strategies and assessment methods are aligned with the intended learning outcomes at the program and course levels.
3-2-9	Teaching and learning strategies are student-centered and encourage active learning.
3-2-10	Teaching and learning strategies and assessment methods in the program vary according to its nature and level, enhance the ability to conduct research, and ensure students' acquisition of higher cognitive thinking and self-learning skills.
3-2-11	The learning outcomes of the field experience activities are aligned with the learning outcomes of the program; and appropriate strategies for training, assessment, and training venues are identified in order to achieve these outcomes.
3-2-12	Both the program field-experience supervisor and the field supervisor are informed with the intended learning outcomes and the nature of the tasks entrusted to each of them (supervision, follow-up, student assessment, evaluation and development of field experience); and their commitment is followed up according to specific mechanisms.
3-2-13	The program ensures a unified application of its study plan as well as the program and the course specifications offered at more than one site (sections of male and female students and different branches).
<b>3-3</b>	<b>Quality of Teaching and Students' Assessment</b>
3-3-1	The program monitors the commitment of the teaching staff to the learning and teaching strategies and assessment methods included in the program and course specifications through specific mechanisms.
3-3-2	The necessary training is provided for the teaching staff on learning and teaching strategies and assessment methods identified in the program and course specifications, along with the effective use of modern and advanced technology; and their use is monitored.
3-3-3	At the beginning of each course, students are provided with comprehensive information about the course, including learning outcomes, teaching and learning strategies, and assessment methods and dates, as well as what is expected from them during the study of the course.
3-3-4	The courses are periodically evaluated for ensuring the effectiveness of the teaching and learning strategies and assessment methods, and reports are prepared on them.
3-3-5	The program applies mechanisms to support and motivate excellence in teaching, and encourages creativity and innovation of the teaching staff.
3-3-6	The program implements clear and publicized procedures to verify the quality and validity of the assessment methods (e.g., their specifications, diversity, and comprehensiveness to cover the

	learning outcomes, distribution of grades and accuracy of marking), and to ensure the level of student achievement.
3-3-7	Effective procedures are used to verify that the work and assignments of students are of their own.
3-3-8	The feedback is provided to students about their performance and evaluation results at a time that allows them to improve their performance.

**5.3.2 Standard (3) Procedures:**



**5.3.3 Standard (3) Activities:**

**Procedure (1) :** Graduate attributes and Learning outcomes

- The Subcommittee for Learning Outcomes identifies graduate attributes and ILOs in line with the NQF and consistent with program mission as well as with academic, professional, and labor market requirements.
- The subcommittee ensures graduate attributes are developed in accordance with the program learning outcomes (PLOs)
- The subcommittee ensures that the graduate attributes are approved, by Department council and college council.
- The subcommittee ensures that the graduate attributes are publicly disclosed, and periodically reviewed.
- The subcommittee identifies specific sectors in the Saudi labor market as stated in Saudi NTP Vision and Job Classification therein.
- The subcommittee for CLO –PLO assessment collects students’ assessment data from all faculty to measure the attainment of the learning outcomes every semester.
- The subcommittee prepared Target- actual statements of each course in order to determine the achievement and performance levels of faculty and students

**Procedure (2): Curriculum:**

- The Department Study Plan committee is responsible to suggest, design, develop and modify the program curriculum periodically.
- The Department Study Plan committee ensures that each course description and course specifications are prepared in accordance with the field of specialization.
- A matrix is prepared to align program learning outcomes (PLOs) with the Course learning outcomes (CLOs)
- The study plan committee creates a balance between theoretical and applied courses and schedule them logically in a sequence based on the level of understanding and comprehension required.
- The study plan committee conducts both internal and external benchmarking of all courses and its modules.

- Adequate provision exists for curricular and extracurricular activities during each semester.
- The learning outcomes in the courses are aligned with the program learning outcomes and shown in a matrix
- The teaching and learning strategies and assessment methods are aligned with PLOs and CLOs in order to determine their attainment.
- The faculty employs a student-centered teaching and learning strategy by encouraging them to involve in action learning
- The program Coordinator (HOD), the course coordinators and individual instructors ensure a unified application of the study plan, in both theory and practice, in both male and female sections.
- All course specifications, course description, as well as assessment ( e.,g, midterm and final term exams) are unified in both male and female sections.
- The Field training committee ensures that all trainees attain the learning outcomes as specified in the FT specifications
- Appropriate strategies and activates aligned to the learning outcomes of the program are designed and implemented for field training and field experience
- The field training committee ensures that the tasks assigned to trainees contribute to the attainment of the learning outcomes
- The field training committee ensures that field supervisors and managers at training sites are aware about the intended learning outcomes
- The field training committee has devised a mechanism to supervise, follow-up, and evaluate students' performance during the field training.

**Procedure (3): Quality of Teaching and students' assessment:**

- All teaching staff in the department ensure adherence to the learning and teaching strategies and assessment methods as specified in the program and course specifications
- The Program, through various meetings and Department council platform, urges the instructors to identify suitable learning and teaching strategies and

assessment methods and make use of blackboard, and other advanced technology.

- At the beginning of each semester, the students are provided with a copy of course description containing credit and contact hours, learning outcomes, teaching and learning strategies, assessment methods and intervals of assessment.
- Both direct and indirect methods are employed to periodically evaluate the effectiveness of teaching and learning strategies and assessment methods, and are mentioned in the course reports.
- Adequate rewards and motivations are provided for recognizing excellence and innovation in teaching.
- The program makes available publicly course specifications, and the rules related to learning outcomes, grades calculation methods.
- The iThenticate software (plagiarism checker) is randomly used to ensure that assignments and graduation projects are works of students.
- The Faculty provides feedback to students about their performance periodically and suggest measures to improve their performance.

## **5.4 Standard (4) (Students):**

### **5.4.1 Standard (4) Criteria:**

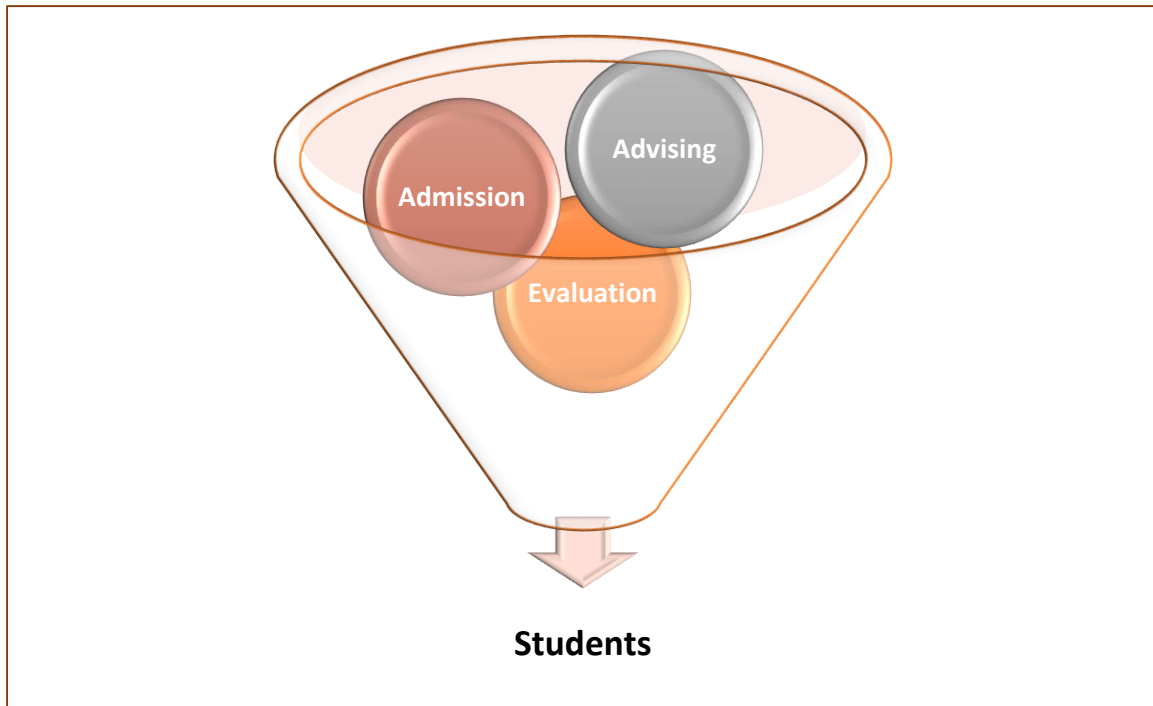
Criteria	
<b>4-0-1</b>	The program has approved and publicly disclosed criteria and requirements for the admission and registration of students that are appropriate to the nature of the program and are applied fairly.
<b>4-0-2</b>	The number of students admitted to the program is compatible with the available resources for the program (e.g., teaching staff, classrooms, labs, and equipment)



- 4-0-3** The program provides basic information to students, such as study requirements, services, and financial fees (if any), through various means.
- 4-0-4** The program applies fair and approved policies and procedures for students transferring to the program and the equivalency of what students had previously learned.
- 4-0-5** The program provides comprehensive orientation for new students, ensuring their full understanding of the types of services and facilities available to them.
- 4-0-6** The program informs students about their rights and duties, codes of conduct, and grievance, complaints, and discipline procedures, using a variety of means; and applies them fairly.
- 4-0-7** Students are provided with effective academic, professional, psychological, and social guidance, and counseling services through qualified and sufficient staff.
- 4-0-8** Mechanisms are applied to identify gifted, creative, talented, and underachieving students in the program, and appropriate programs are available to care for, motivate, and support each group of them.
- 4-0-9** Students in the program are offered extracurricular activities in a variety of fields to develop their abilities and skills, and the program takes appropriate actions to support and motivate their participation.
- 4-0-10** The students and alumni of the program are provided with additional activities for their professional development, consistent with the intended learning outcomes and labor market developments.
- 4-0-11** The program implements effective procedures to monitor students' progress and to verify their fulfilment of graduation requirements.
- 4-0-12** The program implements an effective mechanism to communicate with its alumni and involve them in its events and activities, explore their views, and benefit from their expertise and support; and provides updated and comprehensive databases about them.

- 4-0-13** Effective mechanisms are applied to evaluate the adequacy and quality of services provided to students and measure their satisfaction with them; and the results are used for improvement.
- 4-0-14** The program takes into consideration the special needs of its students (e.g., students with disabilities and international students).
- 4-0-15** The program implements effective mechanisms to ensure the regularity of students' attendance and their active participation in the course and field experience activities.
- 4-0-16** There is an appropriate representation for students in relevant councils and committees.

**5.4.2 Standard (4) Procedures:**



#### 5.4.3 Standard (4) Activities:

##### Procedure (1): Students' Admission and Registration:

- The Department Council determines the number of students that may be accepted (for a period of 4 years) based on comparisons and studies.
- The Department determines the additional admission and transfer requirements for the program (if any).
- The student uploads the details to the university's website and fills in the required forms.
- The Deanship of Admission and Registration provides the conditions and regulations to students.
- The student registers his/ her academic schedule with the help of the academic advisor.

- The Deanship of Admission and Registration reviews the student's schedule in accordance with the specified terms and policies.
- The student prints his academic schedule on the academic website.
- The student deletes or adds some courses after the approval of the academic advisor

**Procedure (2): Transfer Between Colleges/Programs/Universities**

- The transfer request is submitted by the student after completing the specified form supported by the student's academic record.
- The equivalence committee studies the application and reviews it in accordance with the university terms and regulations.
- The committee submits a report on the status of the application with a recommendation for approval or rejection supported by justifications and reasons.
- The Department Council discusses the committee's report and recommends acceptance or rejection through a memorandum submitted to the college's Vice Dean for educational and Academic affairs.
- The request is submitted to the relevant college council to approve the acceptance or rejection of the transfer request.
- Send the decision to the authorized person for implementation of the decision.

**Procedure (3): Initialization and Guidance**

- The academic advising committee prepares a periodic plan for preparing students for the program.
- The department council discusses the proposed configuration plan.
- The academic advising committee prepares the first version of the periodic plan to prepare the students for the program after taking feedback from the department council.

- The Vice Dean of Academic and Educational Affairs studies the plan considering the capabilities of the faculty and the plans of other programs in the college.
- The academic advising committee prepares the final version of the plan considering of the views and recommendations of the Vice Dean of Academic and Educational Affairs.
- The plan is presented to the relevant department council for approval.
- The plan is approved by the College Council.
- The committee implements the plan activities under the supervision of the concerned councils.
- The committee prepares a periodic report on the plan supported by performance indicators and evidences.

#### **Procedure (4): Students Evaluation**

- The exams committee prepares a time plan for the student's evaluation (procedures and activities).
- The department council discusses the time plan for the student's evaluation.
- The exams committee prepares the final version of the plan after receiving the feedback from the department council.
- The Vice Dean of Academic and Educational Affairs studies plans considering the capabilities of the faculty and the plans of other programs in the college.
- The exams committee prepares the final version of the plan considering of the views and recommendations of the Vice Dean of Academic and Educational Affairs.
- The plan is presented to the relevant department council for approval.
- The plan is approved by the College Council.
- The committee implements the plan activities under the supervision of the concerned councils.

- The committee prepares a periodic report on the plan supported by performance indicators and evidences.

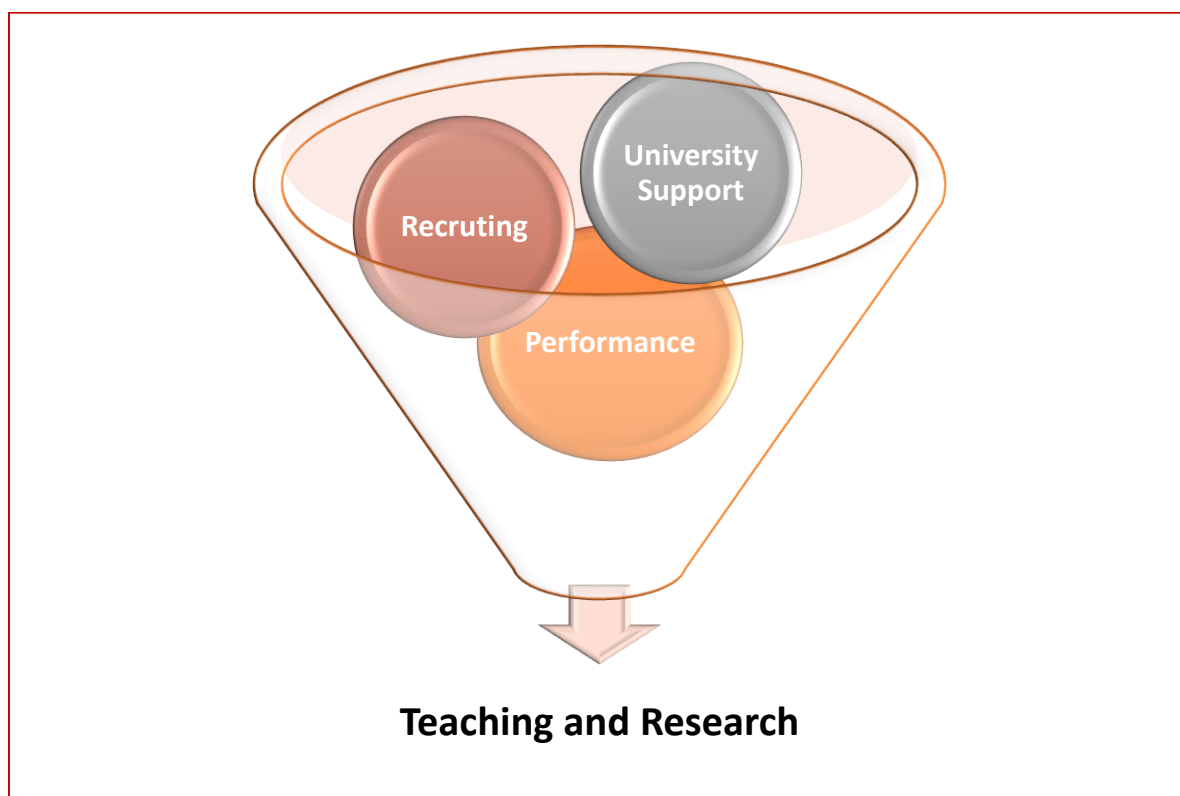
## **5.5 Standard (5) (Teaching Staff)**

### **5.5.1 Standard (5) Criteria:**

Criteria	
<b>5-0-1</b>	The program applies appropriate recruitment policies and procedures to attract faculty members, and retains the distinguished ones
<b>5-0-2</b>	The program has an adequate number of faculty members at all sites where it is offered (e.g., male and female student sections, branches).
<b>5-0-3</b>	The faculty members have the necessary competency (e.g., qualifications, certificates, professional licenses, experience required), and effective teaching skills; and appropriate mechanisms are applied for verification.
<b>5-0-4</b>	The program provides appropriate orientation for new and adjunct teaching staff to ensure their understanding of the nature of the program, their rights, tasks, responsibilities, and workload.
<b>5-0-5</b>	The teaching and adjunct staff in the professional programs include some experienced and highly skilled professionals in the field of the program.
<b>5-0-6</b>	The teaching staff regularly participate in academic activities (e.g., participation in conferences and group discussions , research projects, arbitration of theses and research) to ensure their awareness of the latest developments in their fields of specialization; and their participation in these activities and scientific production are considered in their criteria for evaluation and promotion.
<b>5-0-7</b>	Faculty members effectively participate in research activities and scientific production; and their participation in these activities is considered as one of the criteria for their evaluation and promotion.
<b>5-0-8</b>	Teaching staff participate in community partnership activities; and their participation in these activities is considered as one of the criteria for their evaluation and promotion.

- 5-0-9** Teaching staff participate in professional and academic development programs in accordance with a plan that meets their needs and contributes to the development of their performance.
- 5-0-10** Teaching staff participate in assessment and development activities of the program and institution..
- 5-0-11** Effective mechanisms are applied to evaluate the adequacy and quality of the services provided to the teaching staff and to measure their satisfaction with them.
- 5-0-12** The performance of the teaching staff is regularly assessed according to specific and published criteria; feedback is provided to them; and the results are used in improving the performance.

### 5.5.2 Standard (5) Procedures



### 5.5.2 Standard (5) Activities

#### Procedure (1): Staff Recruiting:

- Appointment of Saudi lecturers or teaching assistance (TA),
  - An announcement is published on the official website of the university, and after the completion of the announcement deadline, all applications are sorted out to select those who meet the conditions of application. The list of eligible candidates is sent to the department.
  - The department conducts a written examination for all the shortlisted applicants. A personal interview is conducted by a college level committee for all candidates successful in the written examination. This committee comprises members of experienced faculty members and the department head
  - All successful applicants are ranked according to their grades in the written test and interview. The Department sends the recommendations as well as the number of teaching staff required by the department. All appointments are approved by the Department Council as well as the College Council.
- The process to appoint Saudi faculty members or transferring the services of a Saudi faculty member from another university to Prince Sattam bin Abdul-Aziz University involves a process with several stages:



- The applicant's doctoral thesis is examined and a report is written by a panel of senior faculty members with academic and research experience.
- A personal interview is carried out with the candidates through a committee formed at the college level, in which the department is represented by a senior faculty member or the department head
- A second personal interview is conducted in the last stage with the permanent Committee for Promotions and Appointments at the university level. The department is also represented in this interview by a senior faculty member or the department head.
- The process to appoint Non-Saudi faculty members also takes place in several stages,
  - The CVs of the candidate for an academic position in the department are examined and official minutes are prepared by the department's "Outstanding Faculty Members Attraction Committee". The criteria of selection include excellent record in teaching and research experience.
  - The committee submits its report and a list of recommended candidates to the head of the department for further communication with the candidates and inform its decision to the dean of the college.
  - After the selection, a contract is sent by the Dean of the College to the candidate to sign and send the acceptance.
  - Finally, all successful candidates are contacted by a committee formed by the university to complete the contracting procedures at the Saudi Cultural Attaché in the country of the candidates.

### **Procedure (2): University Support**

All faculty members of the program receive various forms of support.

- At the beginning of the first semester of each year, the university organizes an orientation program (3-5 days) for all freshly recruited faculty members.
- During each academic year, subsequently, various deanships such as Deanship of Development and Quality, Deanship of Scientific Research, and Deanship of Information Technology organize various workshops covering a wide range of professional /academic interest.
- All faculty members are encouraged to attend and participate in 4-5 workshops per year. The participation and attendance certificates are taken into account in academic promotion or the annual appraisal reports prepared by the Head of the program.
- The university, through Deanship of Scientific Research, offers various forms of sponsorship to support scientific research. Each staff member receives at least one research project every year
- The university offers excellent learning resources either through Saudi digital library or the University central library
- The college offers good environment for teaching and research activity
- The program offers a chance for staff members to evaluate their research activity during Seminar activity held frequently during each Semester.
- The university enables academic promotion for all faculty members, after satisfying certain conditions and rules.

### **Procedure (3): Performance**

- All faculty members contribute in the program specific committees and activities.
- All faculty members have teaching load according to their academic rank.
- All faculty members, aside of their teaching load, have 5-6 hours as an office and academic advising hours in their weekly timetable.
- All faculty members adopt various teaching strategies, assessment tools to evaluate student learning outcomes as prescribed in course specifications.
- Faculty members are encouraged to give extra professional/academic workshop for undergraduate students, for the sake improving their skills.
- All faculty members are responsible to prepare course portfolio by the end of each semester.

**Procedure (4): Evaluation: Teaching and Research**

- The scientific research outcome of each faculty member is counted and reflected in his or her annual appraisal and evaluation report.
- The exam committee examines the Exam papers of each course to ensure whether they are aligned to the prescribed program and course learning outcomes.
- All faculty members are required to prepare PLO-CLO matrix to evaluate their learning outcomes according to the criteria of the Quality assurance unit of the College.

**5.6 Standard 6 (Learning Resources, Facilities, And Equipment)**

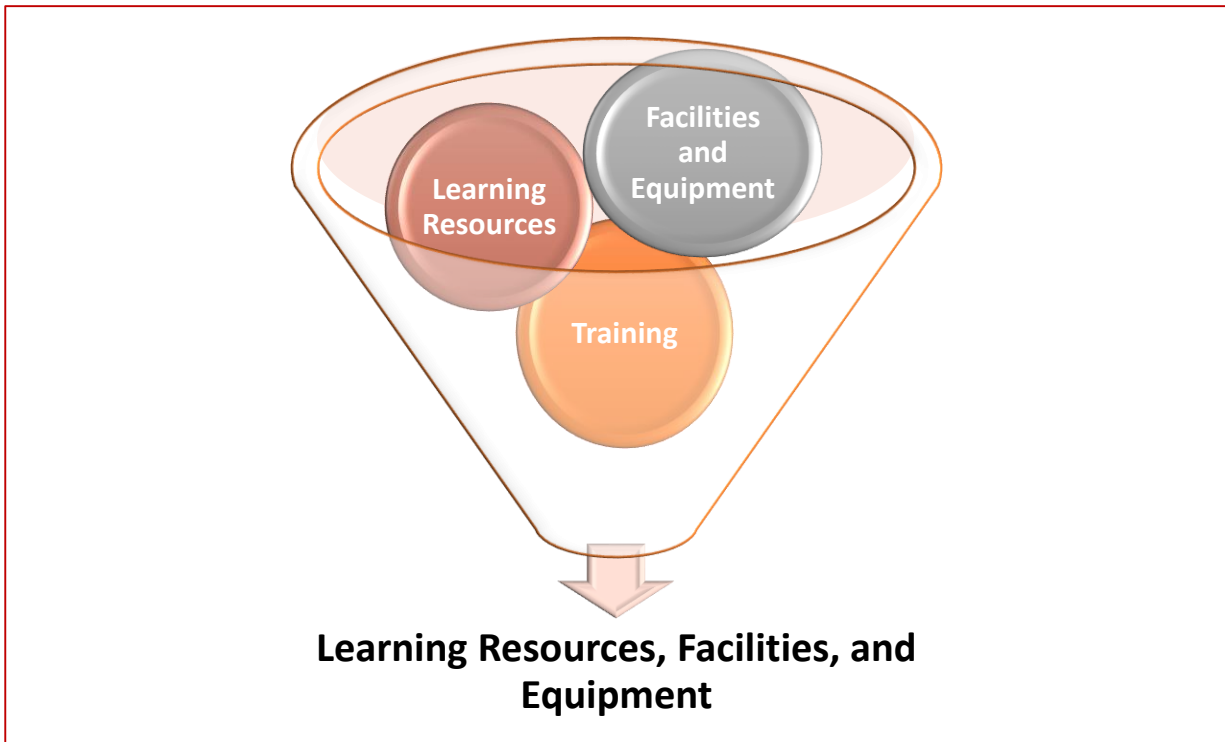
**5. 6.1 Standard (6) Criteria:**

Criteria	
6-0-1	The program implements clear policies and procedures that ensure the adequacy and appropriateness of learning resources and services provided to support student learning.

6-0-2	The program implements effective procedures for the management of resources and reference materials needed to support teaching and learning processes.
6-0-3	The library has a sufficient number of various resources that are easily accessible and appropriate to the needs of the program and the number of students; are made available in adequate and appropriate times for male and female student sections; and are updated periodically.
6-0-4	The program has specialized electronic resources (e.g., digital references, multimedia, software), and appropriate databases and electronic systems that allow beneficiaries to access the information, research materials, and scientific journals from within or outside the institution.
6-0-5	The program has laboratories, computer and technology equipment, and materials that are suitable to the specialty and sufficient to conduct research and scientific studies according to the program goals; and applies appropriate mechanisms to maintain and update them.
6-0-6	The teaching staff, students, and employee of the program have the appropriate orientation and technical training and support for the effective use of resources and means of learning.
6-0-7	The program has the suitable classrooms and facilities for its needs.
6-0-8	All health, and general and professional safety requirements are available in the facilities, equipment, and the educational and research activities.
6-0-9	Standards for safety, environmental conservation, and hazardous waste disposal are applied efficiently and effectively.
6-0-10	The program has the sufficient number of qualified technicians and specialists for the operation and preparation of laboratories.
6-0-11	The program has facilities, equipment, and services suitable for those students, teaching staff, and employee with disabilities.
6-0-12	The program has the appropriate technologies, services, and environment for courses offered through distance or e-learning according to their own specific standards.

6-0-13 The program evaluates the effectiveness and efficiency of learning resources, facilities, and equipment of all types; and the results are used for improvement.

### 5.5.2 Standard (6) Procedures



### 5.5.2 Standard (6) Activities

#### Procedure 1: Learning Resources

- The concerning committee determines the resources and reference materials needed to support teaching and learning processes sufficient for all courses and students' number at the beginning of each semester.
- Feedback is taken from the stakeholders (students - faculty members).

- The required learning resources are represented to the department council to discuss.
- The required learning resources are represented to the concerned Vice Dean of the college.
- The required learning resources is approved by the Department Council.
- The required learning resources is submitted to the College Council to discuss the need, and then are approved
- Key performance indicators are measured by taking feedback from the stakeholders (students - faculty members) at the end of the semester.
- A benchmarking measure is made for the availability of learning resources for the program with similar local and international programs.
- Building an improvement and development plan based on key performance indicators and benchmarks.
- Periodic reports are made on the availability of learning resources for the program.

### **Procedure 2: Facilities and Equipment**

- The concerning committee determines the required facilities and equipment like classrooms, laboratories, electronic resources, technology, and computer needed to support teaching and learning processes sufficient for all courses and students' number at the beginning of each semester.
- Feedback is taken from the stakeholders (students - faculty members).
- The required facilities and equipment are represented to the department council to discuss.
- The required facilities and equipment are represented to the concerned Vice Dean of the college.
- The required facilities and equipment are approved by the Department Council.

- The required facilities and equipment are submitted to the College Council to discuss the need, and then are approved
- Key performance indicators are measured by taking feedback from the stakeholders (students - faculty members) at the end of the semester.
- A benchmarking measure is made for the availability of facilities and equipment for the program with similar local and international programs.
- Building an improvement and development plan based on key performance indicators and benchmarks.
- Periodic reports are made on the availability of facilities and equipment for the program.

### **Procedure 3: Training Programs**

- The concerning committee determines the required orientation and technical training and support for the effective use of resources and means of learning at the beginning of each semester.
- Feedback is taken from the stakeholders (students - faculty members).
- The required training programs are represented to the department council to discuss.
- The required training programs are represented to the concerned vice dean of the college.
- The required training programs are approved by the department council.
- The required training programs are submitted to the College Council to discuss the need, and then are approved
- Key performance indicators are measured by taking feedback from the stakeholders (students - faculty members) at the end of the semester.
- A benchmarking measure is made for the availability of facilities and equipment for the program with similar local and international programs.
- Building an improvement and development plan based on key performance indicators and benchmarks.

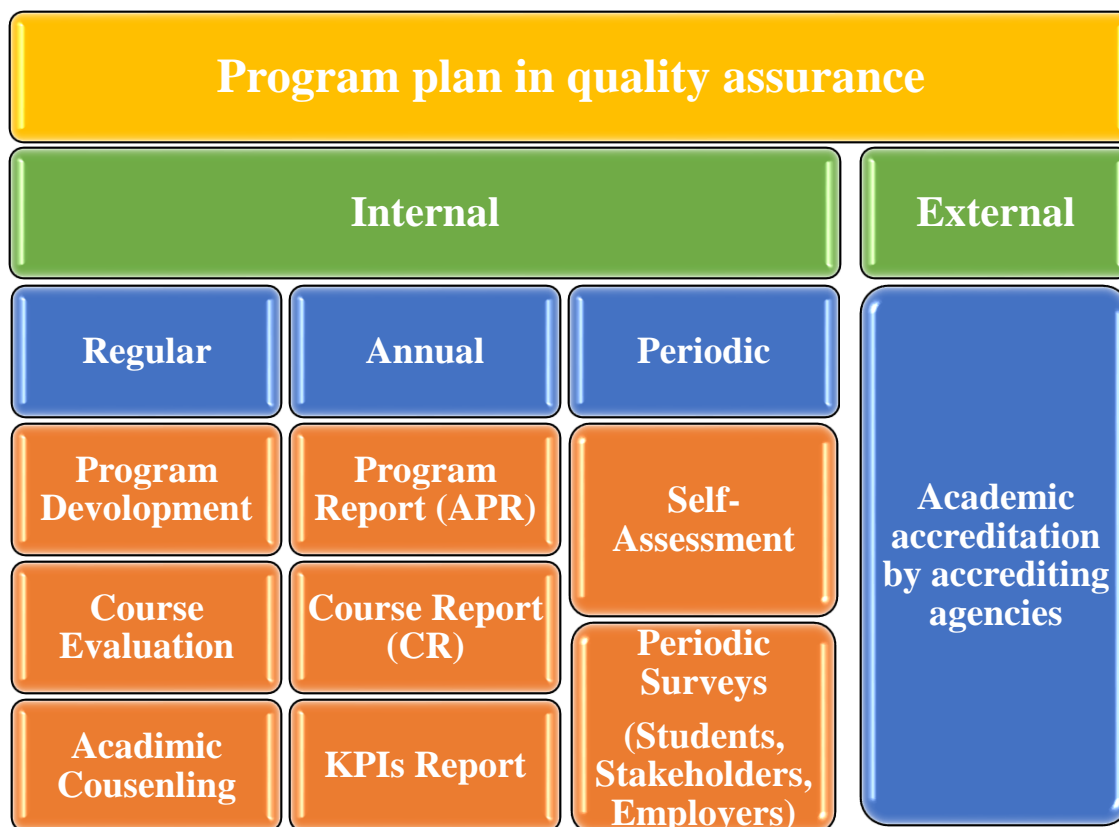
- Periodic reports are made on the availability of training programs for the program.

## 6. Program plan for quality assurance

Program plan of quality assurance has been designed as a tool to support both internal self-evaluation and external quality assurance activities. The content of the plan was developed over time, starting with a review of national and international policies, rules and regulations, considering feedback from key stakeholders and the outcomes of a variety of testing activities.

Mathematics program places great importance and value on students' involvement in its processes and seeks to promote their engagement in quality wherever appropriate. These include the participation of the students in all survey evaluations related to quality and development. It is important to note that each process is informed by the output of others, to create a coherent framework. The following diagram represents a summary of the program plan of quality assurance processes:





## 7. Regular Activity

### 7.1 Program development

PSAU provides guidelines to support the development of new programs or updating existing programs. The guidelines include information sheets on key strategic areas that should be considered as a checklist to guide the process of designing and reviewing programs, and a comprehensive list of pedagogical principles. The university always ensures verification of quality standards through its procedures for program approval and hence several measures have been taken into consideration. These include:

1. External reference points, including any relevant subject benchmark statements.
2. NQF and NCAAA criteria and standards.
3. The requirements of professional and statutory bodies, where appropriate.
4. The compatibility of program proposals and developments with the university and college missions.
5. The program's commitment to the university's Graduate Attributes.

Mathematics program provides a coordinated package of learning experiences within which all components contribute to the learning outcome expected from the students. Each course of the mathematics program has specific goals/objectives reflecting part of the learning outcomes package of the program. The program has to be developed to ensure that the learning is delivered by the courses of the program and reflect clearly the goals and learning outcomes included within the program. Program design, development, and approval are important steps in setting programs at an appropriate academic standard. Adaptation of any international standards needs to respect the NCAAA's and NQF Standards for Quality Assurance.

PSAU adopts several stages to ensure proper developing of its programs. These include a proposal/planning stage, a development/design stage, and an approval stage. The Standing Committee of Study Plans, presided over by the Vice Rector of Education and Academic Affairs, is responsible for studying proposals for new programs and making recommendations to the University Council for the approval of the developed program. This can be summarized in the following procedures:

1. Colleges, through their departments, have the authority for the development of new programs or modifications to the existing ones. This is done through proposals that are submitted to the Standing Committee for Study Plans.
2. New program proposals or any modifications in the existing programs are assessed and approved or rejected by the Standing Committee for Study Plans

using criteria that ensure thorough and appropriate consultation in planning and capacity for effective implementation.

3. If these proposals are approved by the standing committee, then they are submitted to the university council for final approval.
4. If they are rejected by the standing committee then they are sent back to the college with the relevant recommendations for further study.
5. PSAU has delegated the authority for minor changes in programs such as change of text books and reference lists, modified planned teaching strategies, details of assessment tasks, and minor updating of course content, with the relevant colleges.

An approval is a multi-stage activity involving the Department/College Council, Standing Committee of Study Plans and the University Council, which is responsible for the final approval. After a program has been approved, then following each cycle of delivery there will be a monitoring stage (typically course and program annual monitoring) and a periodic review stage, which typically takes place five years after the last program approval (this is shortened to four years when a program is approved for the first time).

## **7.2 Course Evaluation**

Courses in mathematics program are evaluated using an electronic survey, which requires a written or selected response in answer to a series of questions in order to evaluate the instruction of a given course. These surveys provide constructive feedback which the faculty members and university can use to assess the quality of course delivery.

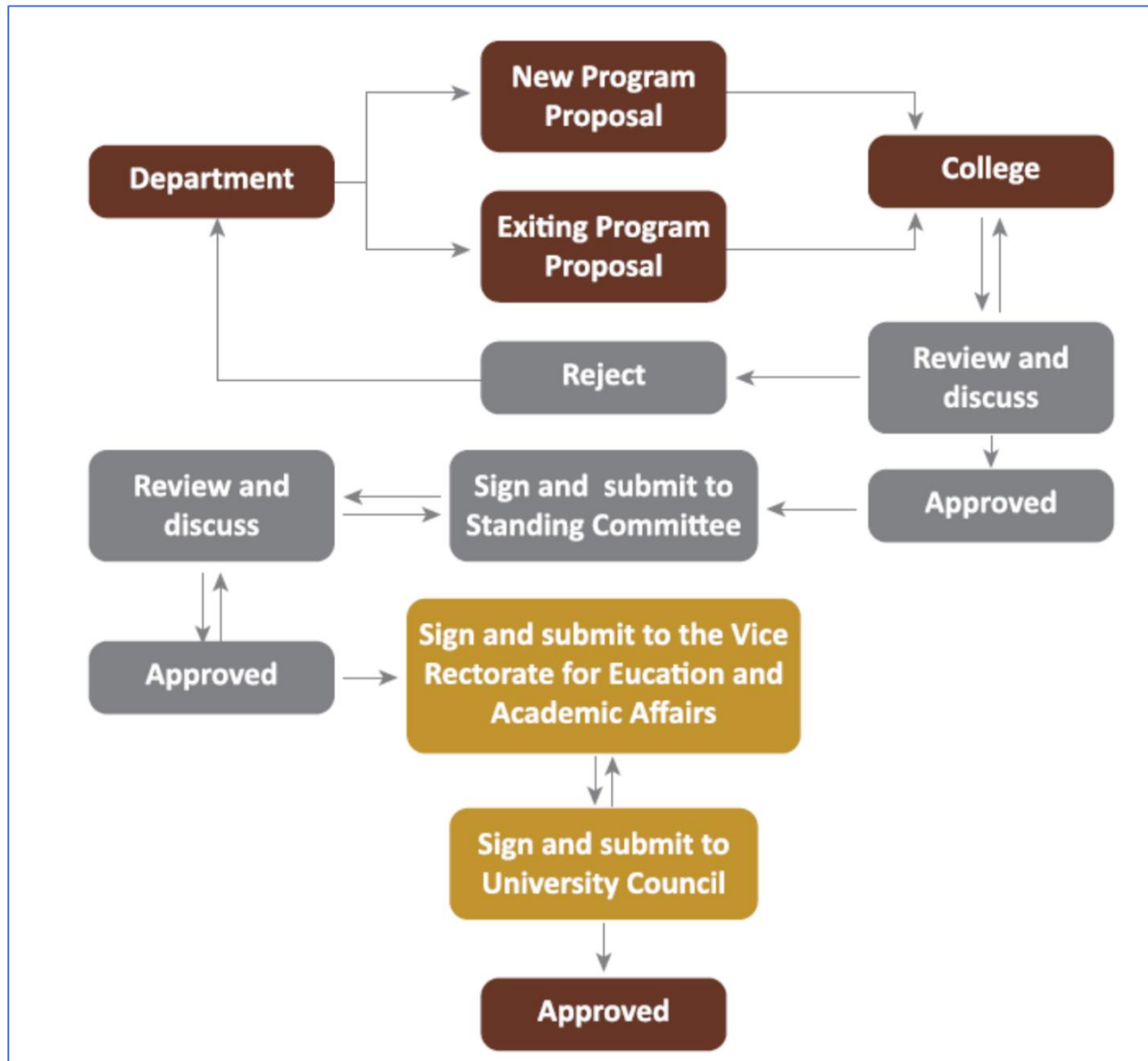
The process of (a) gathering information about the impact of learning and teaching practice on student learning, (b) analyzing and interpreting this information, and (c) responding to and acting on the results is valuable for several reasons.

It enables instructors to review how others interpret their teaching methods. The information can also be used by administrators, along with other input, to make summative decisions and make formative recommendations (e.g., identify areas where a faculty member needs to improve). Typically, these evaluations are combined with peer evaluations, supervisor evaluations, and results of student's test scores, to create an overall picture of teaching performance. Course evaluations are implemented in one of two ways, either summative or formative.

Mathematics program encourages staff to use a variety of mechanisms to obtain student feedback to promote ongoing dialogue between students and staff and to minimize overreliance on one particular mechanism. To ensure practice is consistent, the program sets out its requirements for gathering course evaluation data from students via questionnaires in its course evaluation policy. The key elements of the program's policy on course evaluation are:

1. Students should be given clear instructions on how to complete the questionnaire and advised when it will be circulated.
2. The data from the completed questionnaires should be summarized in a summary statistical annual report.

Course evaluation template



### 7.3 Academic counseling

Faculty members of the mathematics program are required to provide academic counseling to students to overcome difficulties. Students who, for instance, show a below average performance are provided with the necessary counseling by their advisors. Academic advisors are faculty members who have experience in and have been trained on the range and extent of support services available to the students. The regular meetings with students and the analysis of surveys on students' satisfaction with the academic counseling process provide feedback on the adequacy of assistance and counseling provided.

Furthermore, the Deanship of Development and Quality (DDQ) monitors the conduct of academic advising during its on-site visits to colleges through reviewing the evidence and face-to-face meetings with students. Faculty members strive to assist students in learning, counseling, and other academic activities. In addition to the teaching load of faculty members specified by the Council of Higher Education, an experienced faculty member is allotted a group of students, to whom they will provide academic advice during the semester. The process is automated / system-generated to obtain a uniform and unbiased allocation. The same method is being followed in all colleges of PSAU (Academic Advisor Guidebook).

Each student is regularly provided with the name and office hours of his/her academic advisor. At the beginning of each semester, the Academic Advising committee organizes orientation sessions for the newly recruited faculty members regarding the Academic Advising activities. Most academic advising sessions are conducted face to face with documentation of the events in special forms.

## 8. Annual Activities

Annual activities are carried out to evaluate the operation of academic activities; these activities include reviewing courses and program reports, key performance indicators (KPIs), student performance, and other measures of the quality of the student learning experience throughout the preceding year.

Annual monitoring of programs and courses is the cornerstone of the quality assurance process. The aims of the annual program/course reports are:

1. To evaluate the statistical information on student recruitment, grades, progression and completion.
2. To consider and respond to inputs and feedback from students, and, if appropriate, external agents such as professional and accreditation bodies.
3. To reflect on the learning, teaching, and assessment strategies deployed and consider any recommendations for change.
4. To review the appropriateness and effectiveness of the learning outcomes in securing the program aims and objectives.
5. To recommend changes for improving the student learning experience or curriculum content.

### 8.1 Annual Program Report and Annual Course Report

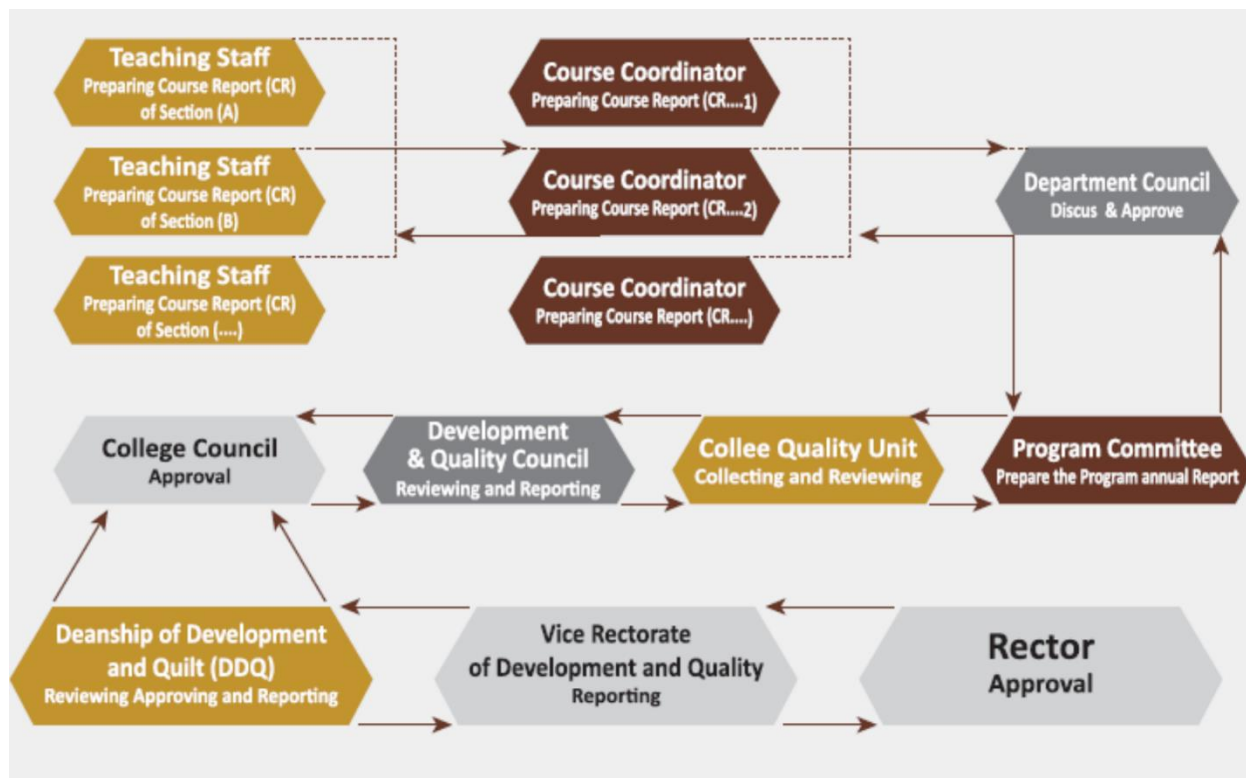
Annual monitoring of programs and courses is a continuous process by which a program and its constituent courses are kept under review. The outcomes of this review are reported in an Annual Program Report (APR). All academic programs are required to identify their strengths and weaknesses and set action plans to act upon them through program and course reports based on NCAAA templates (<https://etec.gov.sa/en/productsandservices/NCAAA/AccreditationProgrammatic/Pages/Forms.aspx>).

APRs are prepared by the program coordinator in consultation with faculty members in the program. The reports are submitted to the head of department or college and used as the basis for improvements, modifications or changes in the program which are used in the Self Study Report for Programs (SSRP) and by external reviewers for accreditation. A separate course report (CR) should be submitted for every course and for each section or campus location where the course is taught, even if the course is taught by the same faculty member. Each CR is to be completed by the course coordinator at the end of each course and given to the program coordinator. A combined, comprehensive course report should be prepared by the course coordinator and reports from the separate locations are to be attached, based on the NCAAA requirements.

To implement these improvement plans effectively, PSAU has set out a mechanism for reviewing the course and program reports. This mechanism works at program, academic department, college and university levels. This ensures the integration of evaluation and quality improvement plans with the normal administrative process.



### The Mechanism for Reviewing the Course & Program Reports



According to this mechanism, the Department Council will discuss and approve the APRs and CRs prepared by the program coordinator and course instructors, respectively. In turn, the program committee will prepare the APR / CRs for the College Quality unit, which will review the Program Annual Monitoring report and prepare a College Annual Monitoring report. The reporting procedure is designed to ensure that issues arising from monitoring are properly considered, reflected, on, and acted upon at each stage and by the relevant committees. In turn, these reports are submitted to the Development Quality council for reviewing and reporting to the College Council, which will approve these reports. If approved, each report will be submitted to the DDQ for review and approval and finally reported to the Vice Rectorate of Development and Quality which then reports to University Council for

final approval. Responses are also provided at each stage - closing the feedback loop and ensuring that actions and outcomes are reported back to staff and students is a crucial element of Annual Monitoring as well as other processes.

## **8.2 Key Performance Indicators (KPI's)**

Mathematics program has adopted the NCAAA recommended indicators for programs (PKPIs) to monitor and evaluate the quality of courses and programs. By doing so, the program aims to achieve the following:

1. Controlling and monitoring the level of progress towards achieving the mathematics program's objectives
2. Assisting those with authority to make decisions based on correct and accurate information
3. Monitoring performance for benchmarking with other universities
4. Ensuring transparency and good governance
5. Facilitating the process of program evaluations to achieve one of the most important requirements for academic accreditation.

The results of these indicators are updated regularly for all academic programs and used for internal and external benchmarking comparison. A collective report containing the results of KPIs for the program is prepared annually and distributed to relevant parties. Mathematics program has established a standing committee for KPIs, which is responsible for identifying and approving the KPIs to monitor and evaluate the performance. This committee has issued A "Guidebook of Key Performance Indicators", with a detailed explanation of the adopted KPIs.

## 9. Periodic Activity

Mathematics program operates two periodic internal review processes: Self-assessment and Satisfaction of the program stakeholders.

### 9.1 Program Self-Assessment

Mathematics program periodically prepare their Self-Study Reports (SSR) in compliance with the requirements of “The Standards for Quality Assurance and Accreditation” defined by the NCAAA. Each SSR should include all the necessary information to be read as a complete self-contained report on the quality of the program and provide a thorough examination of the quality of the program.

The mission and objectives of the program and the extent to which they are being achieved are thoroughly analyzed according to the standards for quality assurance and accreditation defined by the NCAAA.

The SSR is considered as a research report on the quality of the program. It should include sufficient information to inform a reader who is unfamiliar with the program about the process of investigation and the evidence on which conclusions are based and enable him or her to have reasonable confidence that those conclusions are sound.

The SSR is written with a focus on clarity and completeness of all information and supportive evidence from the program concerned. In addition, a verification of the analysis and advice from others deemed able to offer an unbiased and independent opinion are used during the preparation of this report. The completed scales evaluation sheets for the best practices, and for each standard as a whole, are prepared with the specific requirements contained in NCAAA’s document ‘Self-evaluation Scales (SES).

This multi-faceted task is accomplished through wide participation among faculty members in the program, in which many teams are formed comprising members

from male and female sections who actively participate. Each team is assigned specific duties, and a steering committee of the program is established to coordinate all tasks related to the preparation of the self-study report.

Program' SES and SSR are submitted to the DDQ to be evaluated by PSAU's board of internal assessors. Assessors' feedback is then submitted to the program quality unit to accept and modify these changes and finally resubmitted to an experienced external reviewer, to obtain an independent evaluation of the two documents. The reviewer evaluates the SES and SSR drafts in light of all supporting evidence and key performance indicators (KPIs).

## **9.2 Periodic Survey**

The mathematics program uses many surveys introduced by the DDQ, PSAU as instruments of indirect evaluation of its quality assurance processes. These surveys are centrally administered, and the results are provided to the respective units for the sake of comparison and analysis as a basis for their development plans. Among other things, these surveys (online/ offline) measure the satisfaction level of stakeholders with university services such as libraries, IT services, and the experience of learning in general. These surveys are unified tool (both online and offline) for internal stakeholders such as students, faculty, staff.

The DDQ regularly distributes questionnaires to the university's stakeholders, including students and academic and administrative staff, to measure their level of satisfaction regarding the policies of the university, the current and future plans, the level of performance of the staff and faculty members, the adequacy of equipment and facilities and other topics that directly or indirectly relate to the students' experience. The questionnaires distributed to the students gather their understandings, opinions and perceptions of the issues relevant to them. These eleven questionnaires comprise:

- A program evaluation survey

- A survey evaluating the student's experience
- A survey evaluating the student activities and services provided
- A survey evaluating the university's mission statement - students
- Alumni survey
- A survey evaluating manuals and regulations
- A survey evaluating academic advising
- A survey evaluating electronic services
- A survey evaluating library and learning resources
- A survey evaluating the digital library
- A survey evaluating facilities and equipment the opinions of faculty members and administrative staff are also obtained regarding different issues, such as policies, facilities, and services provided by the university, by periodically conducting several questionnaires as follows:
  - A survey of academic and administrative staff and leaders, evaluating the university's mission statement.
  - A survey evaluating educational service quality and information resources
  - A survey evaluating the services provided to the administrative staff.
  - A survey evaluating manuals and regulations.
  - A survey evaluating electronic services.
  - A survey evaluating library and learning sources
  - A survey evaluating the digital library
  - A survey evaluating the facilities and equipment

Based on these surveys, the DDQ's statistical report is divided into 23 sections. Each section deals with a single questionnaire in terms of analysis and interpretation of the survey data. In each section, the findings are discussed in three basic paragraphs: the first paragraph highlights the survey results' analysis at the university level, the second paragraph reports the analysis at the gender level, and the third paragraph reports the analysis at the branch level.

## 10. Academic Accreditation by Accrediting Agencies (AAs)

Accrediting agency is an umbrella term for a very diverse group of bodies, including a large number of professional bodies, regulators those with statutory authority over a profession or group of professionals. Accreditation is the process whereby a professional association or non-governmental agency gives recognition to a school or institution for its demonstrated ability to meet predetermined criteria for established professional, statutory or regulatory standards.

The academic content and other aspects of taught programs can often be influenced by the requirements of accrediting bodies and professional associations.

Accreditation provides potential benefits for students:

- It offers recognized fast-track routes for graduates seeking professional status.
- It provides a further way of assuring and enhancing the quality of teaching and learning provision in particular subjects.

Typically, an accredited agency will carry out periodic reviews of the program to ensure that they continue to meet the requirements for accreditation and reflect current thinking about the profession and its development. Such reviews normally take the form of visits by a panel of members of the relevant body, who prepare a report on their findings. The format and organization of these reviews and what is required of subject areas in preparation are defined by the relevant accrediting agency. The university's programs in a large number of subject areas are endorsed or accredited by relevant professional, statutory or regulatory bodies that provide an additional layer of externality and objectivity to the monitoring of our provision.

## 11. Templates used to achieve the program quality

Mathematics program uses the NCAAA templets in achieving the quality assurance processes as they are on the website

<https://etec.gov.sa/en/productsandservices/NCAAA/AccreditationProgrammatic/Pages/Forms.aspx> . These templets are the following:

1. Program Specification (PS)
2. Course Specification (CS)
3. Program Annual Report (APR)
4. Course Report (CR)
5. Field Experience Specifications (FES)
6. Field Experience Report (FER)
7. Self-Study Report for the Program (SSR)
8. Self-Evaluation Scales for Higher Education Program (SES)
9. Program key performance indicators (KPIs)
10. Program Accreditation Eligibility Requirements

## 12. References

Deanship of Quality and Academic Accreditation, PSAU: website

<https://ddq.psau.edu.sa/ar>

Education and training Evaluation Commission, KSA: website

<https://etec.gov.sa/en/productsandservices/NCAAA/Pages/default.aspx>.

**Approved**

**Item 2**

**Department Council Minutes**

**Date**

**10 Feb 2022**

**Program Chair**

**Dr Fahad Al-Shammeri**

**Signature**