



# Quality Assurance Manual

## Bachelor of Mathematical Sciences with tracks (Financial and Actuarial Mathematics, Applied Statistics and Mathematics)

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# CHAPTER 1

## INTRODUCTION

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## Context



## 1.1 Introduction

Quality assurance in higher education is a systematic and continuous process aimed at ensuring that academic programs meet established standards of excellence and achieve their intended outcomes. In the Kingdom of Saudi Arabia, quality assurance and academic accreditation are governed by the Education and Training Evaluation Commission (ETEC), through the National Center for Academic Accreditation and Evaluation (NCAAA).

This Quality Assurance Manual has been developed for the **Bachelor of Mathematical Sciences Program** at Najran University, which includes three academic tracks:

- Financial and Actuarial Mathematics
- Applied Statistics
- Mathematics

The purpose of this manual is to establish a structured and documented Program-Level Quality Management System (QMS) that ensures:

- Alignment with NCAAA Program Accreditation Standards
- Compliance with the National Qualifications Framework (NQF — KSA)
- Consistence with Najran University's approved Quality Manual
- Continuous improvement of academic and administrative processes

This manual serves as the official reference for all quality-related processes within the program.

## 1.2 Scope of the Manual

This manual applies specifically to the Program-Level Quality Management System of the Bachelor of Science in Mathematical Sciences.

It does not replace the institutional quality system of Najran University. Instead, it:

- Operates within the university's governance framework
- Aligns with college-level quality structures

- Focuses on program-specific implementation, monitoring, and improvement

The manual covers governance, planning, learning outcomes assessment, curriculum review, risk management, internal review, documentation, and continuous improvement processes.

## 1.3 Alignment with National and Institutional Frameworks

The Quality Assurance Manual is developed in alignment with:

### 1.3.1 NCAAA Program Accreditation Standards

The manual ensures compliance with the official Program Accreditation Standards and Guidelines issued by NCAAA. All quality processes described in this document are designed to support accreditation readiness and sustainable compliance.

### 1.3.2 National Qualifications Framework (NQF — KSA)

The program's learning outcomes, curriculum design, and assessment processes are aligned with:

- NQF Level 6 (Bachelor's Degree level)
- The three NQF learning domains:
  - Knowledge and Understanding
  - Skills
  - Values, Autonomy, and Responsibility

### 1.3.3 Najran University Quality System

The manual is consistent with:

- The approved Quality Manual of Najran University
- Policies issued by the Deanship of Development and Quality
- University Agency for Educational Affairs regulations

This ensures integration between program-level quality and institutional quality governance.

## 1.4 Quality Philosophy of the Program

The Mathematical Sciences Program adopts a culture of:

- Accountability
- Evidence-based decision making
- Stakeholder engagement
- Continuous improvement

Quality assurance is not viewed as a compliance activity only, but as an ongoing system that supports:

- Academic excellence
- Student success
- Labor market relevance
- Institutional sustainability

The program follows a structured quality cycle based on the PDCA Model (**Plan - Do - Check - Act**), ensuring systematic monitoring and enhancement of all academic processes.

## 1.5 Purpose of the Quality Assurance Manual

The Quality Assurance Manual is the officially approved document that defines the program's policies and procedures to ensure the quality of its operations and outcomes. It serves as the structured framework for managing the Program-Level Quality Management System (QMS) and provides authoritative guidance for the program's core functions "teaching and learning, scientific research, and community engagement. The manual also defines the structure and components of the QMS and clarifies the roles, responsibilities, and accountability mechanisms associated with its implementation.



This manual aims to:

- Promote a culture of quality and enhance awareness of quality management principles among program members.
- Clearly define roles, responsibilities, and accountability within the quality governance structure.
- Establish standardized procedures for planning, implementation, evaluation, and continuous improvement in alignment with the PDCA cycle.
- Ensure alignment with accreditation standards issued by the Education and Training Evaluation Commission and the National Qualifications Framework (NQF).
- Support evidence-based decision-making through systematic data collection and analysis.
- Provide a documented system for evidence management and compliance with internal and external review requirements.
- Maintain continuous readiness for accreditation and external evaluation processes.


Accordingly, the manual functions as a governance reference, an operational guide, and an accreditation-support document, ensuring consistency, transparency, and sustainability in quality management at the program level.

## 1.6 Definitions

This section provides standardized definitions of key terms used throughout this Quality Assurance Manual to ensure clarity, consistency, and alignment with NCAAA and NQF terminology.

### **Quality in Education**

Quality in education refers to the level of excellence achieved in teaching, learning, research, and academic services. It reflects the program's ability to meet established



standards, satisfy stakeholder expectations, and ensure that graduates acquire the required knowledge, skills, and competencies.

### **Quality Assurance**

Quality Assurance (QA) is a systematic and continuous process designed to ensure that academic and administrative activities meet specified standards. It focuses on planning, monitoring, evaluating, and improving performance to achieve program objectives and accreditation requirements.

### **Quality Control**

Quality Control refers to the operational techniques and activities used to verify that specific outputs (e.g., reports, assessments, documentation) meet defined standards and quality criteria.

### **Academic Program**

An Academic Program is a structured set of courses and learning experiences leading to the award of an academic degree. It is designed to achieve defined learning outcomes aligned with NQF and accreditation standards.

### **Course**

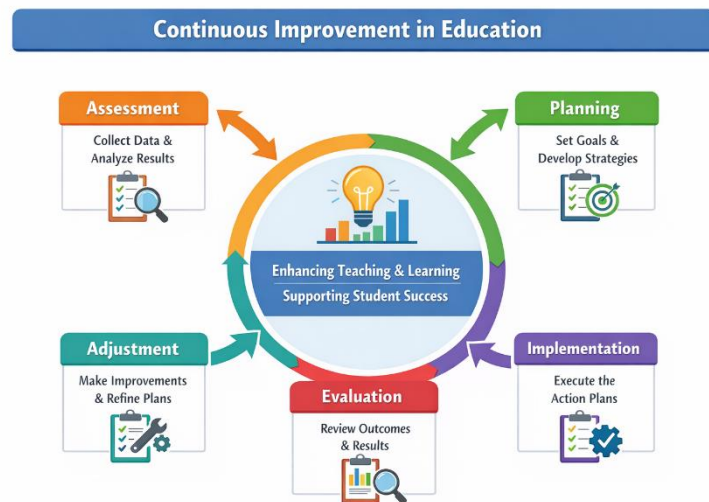
A Course is a defined unit of study within an academic program, delivered during a specific academic period, with clear learning outcomes, assessment methods, and credit hours.

### **Accreditation**

Accreditation is a formal external evaluation process conducted by NCAAA to determine whether an academic program meets established quality standards. Accreditation confirms compliance and supports continuous improvement.

### **Continuous Improvement**

Continuous Improvement is an ongoing, systematic process of evaluating performance data and implementing actions to enhance program quality. It is typically implemented using the PDCA cycle (Plan—Do—Check—Act).



### Academic Accreditation Standards

Academic Accreditation Standards are official criteria and requirements established by NCAAA that programs must satisfy to obtain or maintain accreditation.

### Benchmark

Benchmarking is the process of comparing program performance indicators, practices, or outcomes with internal or external reference points to identify areas for improvement.

### Domains of Learning

Domains of Learning refer to the broad categories of competencies defined by the NQF, including:

- Knowledge and Understanding
- Skills
- Values, Autonomy, and Responsibility

Broad categories of learning types identified in the National Qualifications Framework





## **Learning Outcomes (LO)**

Learning Outcomes are measurable statements describing what students are expected to know, understand, and be able to do upon completion of a course or program.

## **Action Plans**

Action Plans are structured documents outlining specific improvement actions, responsible persons, timelines, and performance indicators.

## **Annual Report**

An Annual Program Report is a comprehensive document summarizing program performance, KPI analysis, learning outcomes assessment results, risks, benchmarking results, and improvement actions during an academic year.

## **Review**

Review refers to the systematic evaluation of program processes, documentation, and outcomes conducted internally or externally to assess effectiveness and compliance.

## **Self-Evaluation Scales**

Self-Evaluation Scales are structured rating tools used by programs to assess their level of compliance with accreditation standards.

## **Self-Study Report**

The Self-Study Report is a comprehensive document prepared by the program for accreditation purposes. It presents evidence of compliance with NCAAA standards and demonstrates program effectiveness.

## **Saudi Arabian Qualification Framework (NQF)**

The National Qualifications Framework (NQF) is the national reference framework that defines qualification levels, learning domains, and expected competencies for academic degrees in Saudi Arabia.

## **Teaching Strategies**

Teaching Strategies are instructional methods and approaches used by faculty members to achieve intended learning outcomes effectively.



## **Key Performance Indicators (KPI)**

Key Performance Indicators (KPIs) are measurable indicators used to monitor program performance against predefined targets.

## **Internal Auditor**

An Internal Auditor is a qualified faculty member trained in quality assurance and accreditation processes who conducts internal reviews and provides improvement recommendations.

## **The University's Internal Auditors Team**

The Internal Auditors Team is a formally appointed university-level committee responsible for reviewing program compliance with institutional and accreditation standards.


## **Stakeholders**

Stakeholders include students, graduates, faculty members, employers, staff, funding bodies, and community representatives who have a direct or indirect interest in the program's performance.

## **1.7 A brief of the Program**

The Bachelor of Science in Mathematical Sciences was established in response to global developments in mathematics, applied statistics, and financial and actuarial sciences. The program was introduced in the academic year 2024/2025, offering three tracks: Financial and Actuarial Mathematics, Applied Statistics, and Mathematics. Since its launch, the program has witnessed strong demand, with 186 male and female students enrolled, reflecting its significance in addressing labor market needs and preparing qualified graduates in various mathematical and statistical applications.

The program adopts a credit-hour system and extends over four and a half years, with the final semester dedicated to field training to ensure students gain practical experience and professional readiness. The department is committed to implementing a comprehensive quality assurance system aligned with the National Qualifications Framework and the requirements of the Education and Training Evaluation Commission. This commitment supports continuous improvement in



teaching and learning processes and contributes to preparing graduates across the three tracks who can integrate effectively into the labor market.

The program aims to equip students with fundamental concepts and theories in mathematical sciences and applied statistics, strengthen the linkage between theoretical knowledge and practical applications in the business sector, develop students' analytical and problem-solving skills, enhance their research capabilities in mathematics and statistics, and foster lifelong learning and teamwork skills that enable them to contribute effectively to community development and professional practice.

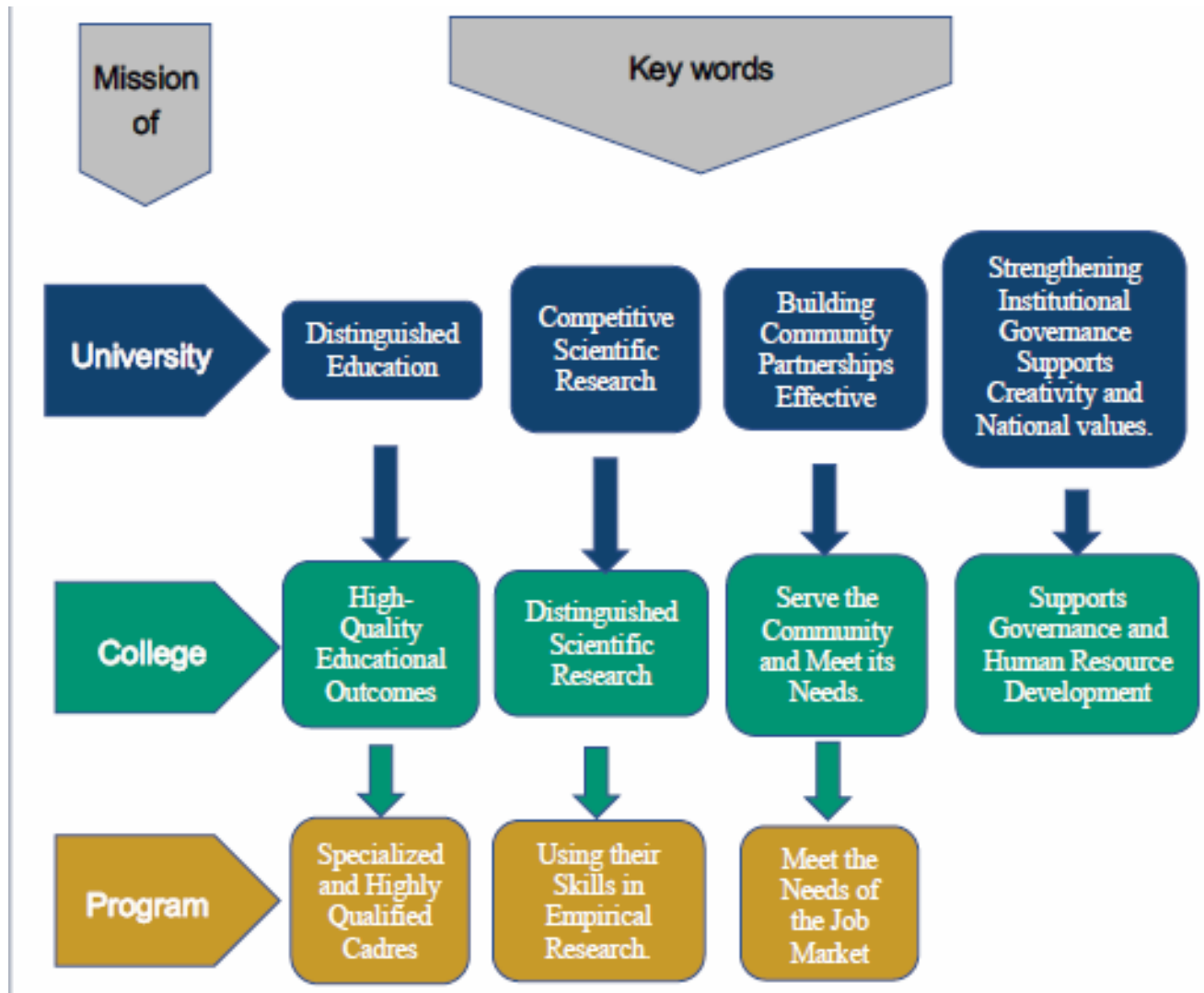
### 1.7.1 Mission of the Program


Preparing specialized and highly qualified cadres in mathematics, applied statistics, finance, and actuarial mathematics to meet the needs of the job market and capable of solving its problems using their skills in empirical research.

### 1.7.2 Objectives of the Program

1	Providing students with fundamental concepts and theories in mathematical sciences and applied statistics.
2	Establishing the linkage between theories of mathematical sciences, applied statistics, and practical applications in the business sector across various domains.
3	Equipping students with mental skills (logical thinking, analysis, reasoning, problem-solving, ...)
4	Empowering students with research skills in mathematical sciences and statistics and their applications in serving the community.
5	Developing students' abilities for lifelong self-learning and working individually as a team.

The mission and objectives of the Mathematics Program are aligned with those of the College of Science and Najran University.





# CHAPTER 2:

## Program Quality Governance and Structure

## 2.1 Purpose of Quality Governance

Effective quality assurance requires a clear governance structure that defines authority, accountability, and responsibility.

This chapter establishes the governance framework of the **Bachelor of Science in Mathematical Sciences Program**, ensuring:

- Clear leadership and accountability for quality processes
- Defined reporting lines
- Structured committee operations
- Transparency in decision-making
- Alignment with Najran University governance and NCAAA standards

Program quality governance ensures that quality is managed systematically rather than individually.

## 2.2 The Program Quality system

The Mathematics Program Quality System comprises an integrated framework of processes, policies, and procedures established to ensure the program's quality and effectiveness. It covers all aspects of program design, implementation, assessment, and continuous improvement to meet the expectations of students, faculty members, employers, and other stakeholders. In addition, the department's organizational structure includes various committees responsible for overseeing activities and operational processes at both the department and program levels.

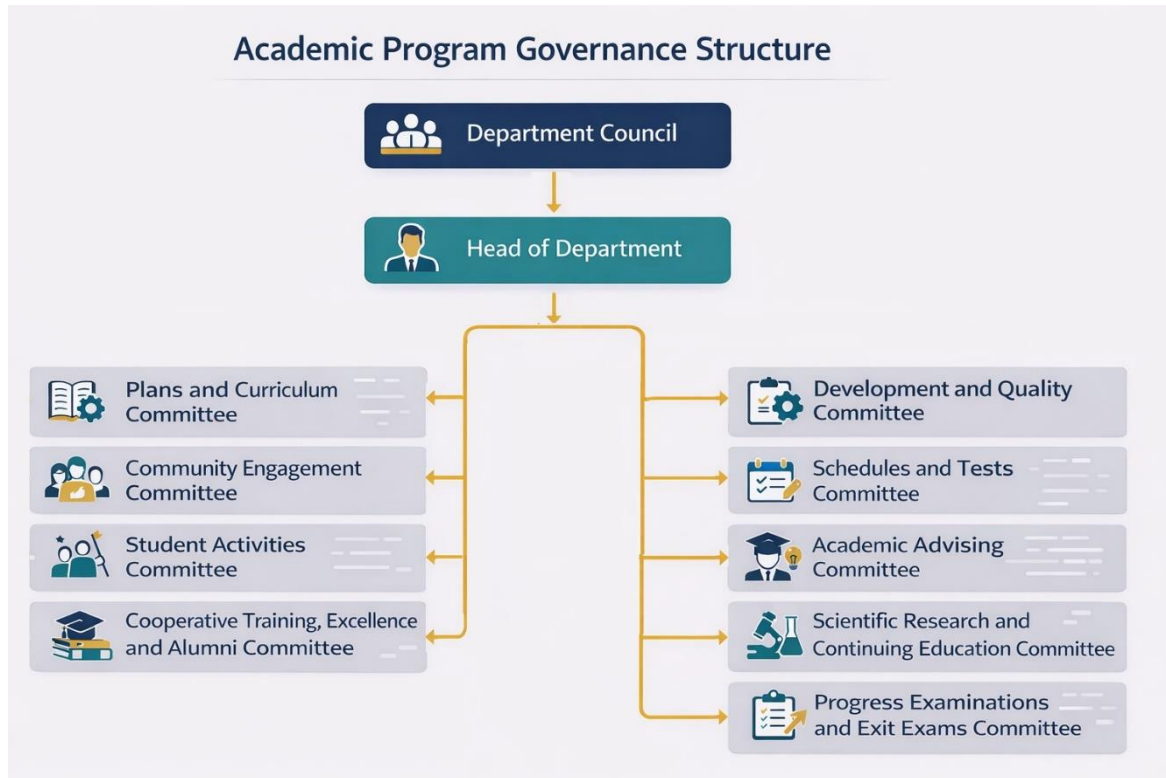
Quality governance at the program level operates within three layers:

1. **Department Council (Strategic Oversight Level)**
2. **Head of Department (Executive Leadership Level)**
3. **Program Quality Structure (Operational Level)**

These layers ensure that quality management is integrated into academic and administrative decision-making.

## 2.3 Organizational structure of the Mathematics department

The governance of the program is embedded within the official organizational structure of the Mathematics Department.



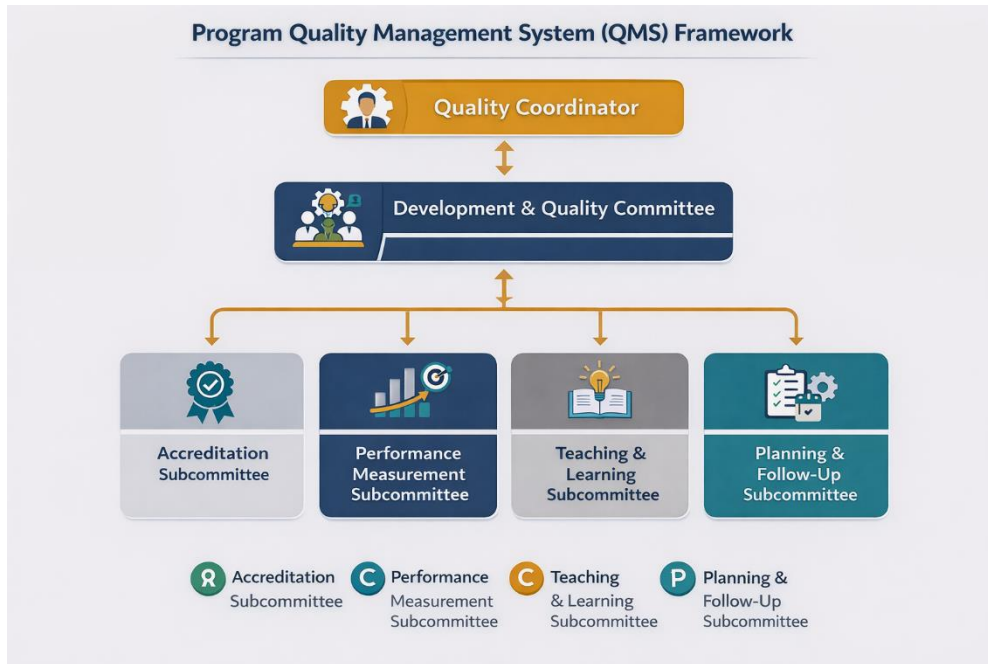
This governance structure ensures:

- Clear authority lines
- Defined accountability
- Structured decision-making
- Formal approval mechanisms
- Oversight and monitoring at multiple levels

The Department Council represents the highest decision-making authority at the department level and serves as the approving body for policies, reports, and improvement plans related to program quality.

## 2.4 Development and Quality Committee:

In accordance with the approved University Quality Manual (Page 32), the Development and Quality Committee represents the central operational body responsible for implementing quality assurance at the department and program levels.



The Committee is chaired by the **Program Quality Coordinator** and includes all department members organized into specialized subcommittees.

Based on the approved structure, the following subcommittees operate under the Development and Quality Committee:

1. Academic Accreditation Subcommittee
2. Performance Measurement Subcommittee
3. Teaching and Learning Subcommittee
4. Planning and Follow-up Subcommittee

As indicated in the official manual, all members of the department participate in quality implementation through these substructures.



## 2.5 Responsibilities of the Development and Quality Committee

The Committee is responsible for:

- Supervising implementation of the Program Quality System
- Reviewing and validating quality documentation prior to formal submission
- Monitoring compliance with institutional and accreditation standards
- Ensuring completeness and traceability of evidence files
- Coordinating preparation of accreditation and self-study documentation
- Monitoring key performance indicators
- Overseeing implementation of approved improvement plans
- Following up on internal and external audit findings


Through these functions, the Committee ensures effective coordination between planning, execution, evaluation, and corrective action.

## 2.6 Governance Responsibilities at the Department and Program Level

### 2.6.1 Department Council Responsibilities:

In addition to its duties as outlined in the Department Council's organizational regulations, the Council shall be responsible for:

- Reviewing and approving the proposed structure of advisory committees for departmental programs.
- Evaluating and endorsing annual operational plans for all department-affiliated programs.
- Examining and approving all quality assurance documentation, including:
  - Evidence submissions.
  - Program descriptions.
  - Assessment reports.

- 
- Improvement plans.
  - Other accreditation-related materials.
  - Addressing implementation challenges faced by quality coordinators in departmental programs and proposing corrective actions.
  - Deliberating on matters concerning:
    - New program development proposals.
    - Existing program enhancement initiatives.
    - All continuous improvement recommendations.

The Council shall make formal decisions on all such matters under its purview.

## **2.6.2 Head of Department: Quality Management Responsibilities**

In addition to standard duties outlined in organizational regulations, the Head of Department shall oversee quality system management through the following responsibilities:

### **1. Personnel & Committee Management**

- Annually nominate Program Quality Coordinators for Department Council approval
- Approving Quality Coordinators' recommendations for Quality Subcommittee members

### **2. Quality Oversight & Reporting**

- Identify quality-related matters requiring Department Council review
- Submit program documents/reports to:
  - College Council for approval
  - Designated archives for official record-keeping
  - College Development and Quality Unit for review
- Oversee implementation of internal audit recommendations

### **3. Benchmarking & Continuous Improvement**

- Coordinate with internal/external benchmarking partners to exchange performance indicator data
- Conduct monthly meetings with Quality Coordinators to:
  - Monitor operational plan progress
  - Address implementation challenges

### **4. Accreditation Management**

- Prepare programs for external accreditation reviews
- Attend all auditor meetings (independent and external review teams)
- Submit and review reports with Department Council:
  - Independent audit findings
  - External review team recommendations
  - Accreditation conditions (develop corrective action plans when required)

### **5. Delegation Authority**

- May officially delegate specific tasks to faculty members
- Communicate all delegations to department faculty

## **2.6.3 Responsibilities of the Program Quality Coordinator**

### **1. Committee Management**

- Proposal for quality sub-committee heads and members to the Department Head
- Provide technical guidance to sub-committees regarding:
  - Role understanding
  - Task integration within program operational plans

### **2. Meeting Participation**

- Attend all:
  - College Development & Quality Unit meetings

- Department Head meetings
- Training workshops by Deanship/College Quality Units

### **3. Quality Implementation**

- Conduct bi-monthly meetings with Program Quality Committee to:
  - Monitor operational plan progress
  - Track quality/accreditation tasks
- Distribute roles among committees for annual quality report preparation

### **4. Benchmarking & Reporting**

- Recommend internal/external benchmarking partners
- Prepare comprehensive annual quality reports ensuring:
  - Complete documentation
  - Compliance with requirements

### **5. Accreditation Preparation**

- Oversee self-study report preparation and documentation
- Ensure fulfillment of internal review requirements
- Serve as program liaison during accreditation processes

### **6. Documentation Management**

- Upload required documents to:
  - Internal review systems
  - National Center for Academic Evaluation portal (post-review)
- Implement reviewer recommendations

### **7. Continuous Improvement**

- Coordinate with internal reviewers throughout accreditation phases
- Supervise program preparation for external reviews

- Execute additional quality improvement tasks as assigned by Department Head

## 2.6.4 Responsibilities of Development and Quality Committee

This committee is chaired by the Program Quality Coordinator and includes heads of all five subcommittees as members

### 1. Quality Assurance Oversight

- Ensure comprehensive quality control of all program-level documentation
- Conduct pre-submission reviews of all materials for:
  - Approval processes
  - Archival purposes
  - External requests from university authorities

### 2. Documentation Standards


- Verify completeness and accuracy of all:
  - Required data fields
  - Supporting information
  - Documentation processes

### 3. Operational Quality Control

- Systematically review and validate:
  - Program operations
  - Academic outputs
  - All official deliverables

## 2.6.5 Subcommittee's Responsibilities:

These committees carry out their tasks in coordination with the unified committees in all university programs in accordance with the guide for program committees in colleges issued by the University Agency for Educational Affairs and circulated to



colleges on 5/28/1444 AH "taking into account any amendments that may occur to it and approved by the University Agency for Educational Affairs".

### **2.6.5.1 Responsibilities of Academic Accreditation Subcommittee**

The Academic Accreditation Subcommittee is responsible for overseeing all matters related to program accreditation and compliance documentation.

- Preparing and updating accreditation-related documentation.
- Supervising the preparation of the Self-Study Report.
- Mapping program practices to accreditation standards.
- Reviewing and validating accreditation evidence files.
- Monitoring implementation of accreditation recommendations.
- Coordinating preparation for accreditation site visits.
- Ensuring continuous readiness for internal and external reviews.
- Submitting periodic progress reports to the Development and Quality Committee.

### **2.6.5.2 Responsibilities of Performance Measurement Subcommittee**


The Performance Measurement Subcommittee is responsible for monitoring and analyzing program performance indicators.

- Identifying and tracking program KPIs.
- Collecting and analyzing annual performance data.
- Conducting benchmarking with internal and external institutions.
- Preparing performance analysis reports.
- Identifying performance gaps.
- Recommending corrective and improvement actions.
- Monitoring achievement of operational plan indicators.
- Submitting KPI reports to the Development and Quality Committee.

### **2.6.5.3 Responsibilities of Teaching and Learning Subcommittee**

The Teaching and Learning Subcommittee is responsible for monitoring academic delivery and assessment practices.

- Reviewing teaching strategies and instructional practices.

- 
- Monitoring assessment methods and tools.
  - Ensuring alignment between course learning outcomes and program learning outcomes.
  - Reviewing course files and documentation.
  - Analyzing student feedback and satisfaction results.
  - Recommending improvements in teaching and learning practices.
  - Supporting professional development related to teaching quality.
  - Submitting periodic academic quality reports.

#### 2.6.5.4 Responsibilities of Planning and Follow-Up Subcommittee

The Planning and Follow-Up Subcommittee is responsible for overseeing operational planning and monitoring improvement implementation.

- Preparing the annual operational plan of the program.
- Monitoring implementation progress of approved plans.
- Tracking execution of improvement actions.
- Following up on recommendations from reviews and audits.
- Identifying implementation challenges.
- Proposing corrective measures.
- Preparing periodic follow-up and progress reports.
- Reporting implementation status to the Development and Quality Committee.

## 2.7 RACI Matrix for Program Quality Governance

RACI is a governance tool used to clearly define roles and responsibilities within structured organizational processes. It prevents overlaps, eliminates ambiguity, and ensures accountability in decision-making and implementation.

RACI represents:

- **R — Responsible:** The role that performs or executes the task.
- **A — Accountable:** The role that holds final authority and approves the outcome. Only one "A" should exist per process.
- **C — Consulted:** Roles that provide input before action or decision.
- **I — Informed:** Roles that are kept updated on progress or outcomes.

The following matrix maps governance responsibilities in accordance with Najran University Quality Manual (April 2024, pp. 42—47), structured according to program-level quality operations.

Quality Process	Dept Council	HoD	Quality Coordinator	Quality Committee	Track Coord.	Course Coord.	Faculty	College Quality Unit
Nomination of Quality Coordinator	A	R	I	I	I	I	I	I
Formation of Quality Subcommittees	A	R	C	I	I	I	I	I
Approval of Operational Plan	A	R	C	C	I	I	I	I
Preparation of Operational Plan	I	C	R	R	R	C	C	I
KPI Identification & Monitoring	I	C	R	R	R	C	C	I
Benchmarking Activities	I	R	R	C	R	C	I	I
Review of Program Specification	A	R	C	R	C	I	I	I
Course Specification Preparation	I	C	C	I	R	R	R	I
Course Report Preparation	I	C	C	C	R	R	R	I
Course Report Review & Validation	I	C	R	R	R	C	I	I
Annual Program Report Preparation	I	C	R	R	C	C	I	I
Approval of Annual Program Report	A	R	C	C	I	I	I	I
Learning Outcomes Assessment	I	C	R	R	R	R	R	I
Monitoring Improvement Plan	I	R	R	R	R	C	C	I
Self-Study Report Preparation	I	C	R	R	C	I	I	I
Accreditation Documentation Approval	A	R	C	C	I	I	I	I
Internal Audit Follow-Up	I	R	R	R	C	I	I	C
Submission of Reports to College	I	R	C	I	I	I	I	I



## Governance Interpretation

### Strategic Authority

The Department Council maintains final accountability (A) for major approvals including operational plans, accreditation documents, and annual reports.

### Executive Oversight

The Head of Department (HoD) ensures execution and institutional alignment.

### Operational Leadership

The Quality Coordinator leads implementation and coordination.

### Collective Oversight

The Quality Committee performs review and validation functions.

### Academic Execution


- Track Coordinators oversee track-level implementation.
- Course Coordinators execute course-level documentation and assessment.
- Faculty Members support delivery, data collection, and assessment execution.

### Institutional Monitoring

The College Quality Unit is primarily informed and consulted for oversight but does not execute program-level operations.

## Governance Strength of This Matrix

- ✓ Clarifies accountability boundaries
- ✓ Prevents duplication of authority
- ✓ Aligns with University Quality Manual governance flow
- ✓ Supports audit readiness
- ✓ Enhances transparency in quality operations
- ✓ Suitable for inclusion in Quality Assurance [Manual](#)



# CHAPTER 3: THE QUALITY MANAGEMENT SYSTEM

## 3.1 The Quality Management System and its Elements

### 3.1. The Quality Management System and its Elements

The quality management system in this guide refers to the comprehensive framework implemented by the program in alignment with the university's official standards. This system:



## 3.2 Quality Management System Framework

### 1. System Inputs

The foundational resources that enable quality outcomes:

- Human and material resources
- Governance policies and regulatory frameworks
- Institutional infrastructure

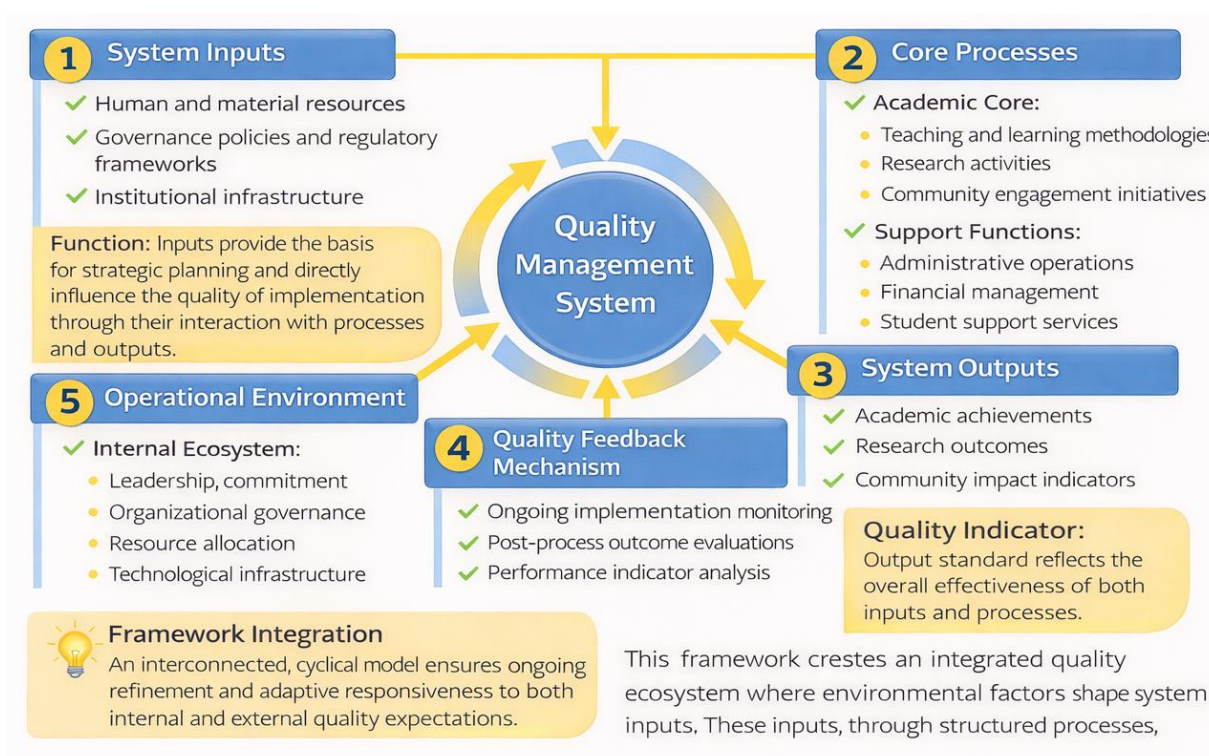
Function: Serve as the basis for planning and directly influence implementation quality through cyclical interaction between inputs, processes, and outputs.

## 2. Core Processes

Structured operations that transform inputs into outcomes:

- Academic Core:
  - Teaching and learning methodologies
  - Research activities
  - Community engagement initiatives
- Support Functions:
  - Administrative operations
  - Financial management
  - Student support services

Note: Each primary process contains specialized sub-processes with defined procedures and quality benchmarks.





### 3. System Outputs

Tangible results demonstrating quality effectiveness:

- Academic achievements
- Research outcomes
- Community impact metrics

Quality Indicator: Output standards reflect the effectiveness of both inputs and processes.

### 4. Quality Feedback Mechanism

Continuous improvement in drivers:

- Real-time implementation evaluations
- Post-process outcome assessments
- Performance indicator analysis

Function: Identifies improvement opportunities, closes the quality cycle, and ensures system sustainability.

### 5. Operational Environment

Contextual factors influencing quality:

- Internal Ecosystem:
  - Leadership commitment
  - Organizational governance
  - Resource allocation
  - Institutional culture
  - Technology infrastructure
- External Influencers:
  - Higher education trends
  - Labor market demands

- Accreditation standards
- Global ranking criteria

This framework creates an integrated quality ecosystem where environmental factors shape inputs, which through managed processes produce measurable outputs, with feedback ensuring continuous system enhancement. The cyclical nature ensures responsive adaptation to both internal and external quality demands.

### 3.3 The Quality Circle

#### 3.3 The Quality Circle

The university adopts the Deming PDCA model for continuous improvement/development through successive cycles of four interconnected processes: planning-implementation-evaluation-improvement, where the outputs of



This model ensures **dynamic quality advancement** through structured, recurring improvement cycles that build upon previous outcomes.

### 3.4 Quality and continuous improvement processes and procedures at the program level

The program operates in accordance with the executive processes and policies authorized by the University Agency for Educational Affairs, as well as the models and methods authorized by the Deanship of Development and Quality's Education and Learning Unit.



#### 3.4.1 Quality determinants of the program's Mission and objectives:





### 3.4.2 Quality determinants of program learning outcomes:

To ensure academic excellence and relevance, program learning outcomes must adhere to the following quality standards:

#### 3.4.2.1 Alignment with Standards & Frameworks

✓ **Academic Standards:**

- Conformity with the Education and Training Evaluation Commission's approved standards
- Compliance with the National Qualifications Framework (NQF) requirements.

✓ **Institutional & Labor Market Alignment:**

- Consistency with the program's approved mission
- Alignment with university graduate attributes
- Responsiveness to labor market needs and industry benchmarks

#### 3.4.2.2 Program-Specific Design

✓ **Stakeholder Engagement:**

- Collaboration with beneficiaries, industry experts, and academic specialists in development

#### 3.4.2.3 Review & Approval Process

✓ **Quality Assurance:**

- Completion of internal review and accreditation by official academic councils.

✓ **Transparency & Communication:**

- Publication and dissemination to all relevant stakeholders

#### 3.4.2.4 Continuous Improvement

✓ **Dynamic Updating Mechanism:**

- Regular revisions based on:
  - ❖ Developments in academic discipline
  - ❖ Updated accreditation standards (Education and Training Evaluation Commission)
  - ❖ Labor market trends and global benchmarks
  - ❖ University strategic directions
  - ❖ Annual and periodic evaluation results

### 3.4.2.5 Implementation & Monitoring

#### ✓ Program Planning Matrix:

- Mandatory development of a program planning matrix (aligned with the Deanship of Development and Quality's model)
- Formal approval by university councils
- Integration into annual operational plans with measurable performance indicators

### 3.4.3 Determinants of the quality of the program's study plan:

To ensure academic rigor and relevance, the program's study plan must meet the following criteria:

#### 3.4.3.1 Content & Curriculum Design

##### ✓ Comprehensive Course Coverage:

- Courses must fully align with and support the program's approved goals and learning outcomes.

##### ✓ Scientific & Professional Relevance:

- Content must reflect current advancements in the field, including technical and professional developments.

##### ✓ Balanced Curriculum Structure:

- Equilibrium between general education and specialized courses.

- Integration of theoretical knowledge and practical application.

### 3.4.3.2 Coherence & Compliance

#### ✓ Logical Course Sequencing:

- Courses must build progressively to achieve intended learning outcomes.

#### ✓ Exit Point Requirements (if applicable):

- Clear definition of criteria for intermediate or final exit points (e.g., diplomas, certifications).

#### ✓ Institutional Policy Adherence:

- Compliance with university-approved frameworks for designing, modifying, and implementing study plans.

### 3.4.3.3 Review & Accreditation

#### ✓ Quality Assurance Processes:

- Completion of internal review and accreditation by designated academic councils.

#### ✓ Stakeholder Communication:


- Transparent dissemination of the study plan to all relevant beneficiaries (students, faculty, industry partners).

### 3.4.3.4 Continuous Improvement

#### ✓ Periodic Review & Updates:

- Regular revisions based on:
  - ❖ Changes in the program's mission, objectives, or learning outcomes.
  - ❖ Evolving labor market demands and professional trends.
  - ❖ Updates in accreditation standards (national/international).
  - ❖ Emerging academic and industry developments.

### 3.4.4 Quality determinants of the program learning outcomes measurement plan



To ensure effective assessment and continuous improvement, the measurement plan for program learning outcomes must adhere to the following quality standards:

#### 3.4.4.1 Alignment & Clarity

✓ **Institutional Compliance:**

- Follow frameworks and guidelines approved by the Teaching and Learning Unit.

✓ **Clear Linkage:**

- Explicit alignment between **course-level** and **program-level** learning outcomes.

#### 3.4.4.2 Comprehensive Assessment

✓ **Full Coverage:**

- Measure **all** learning outcomes at both course and program levels.

✓ **Advanced Course Focus:**

- Prioritize measurement in **capstone/"crown" courses** to evaluate cumulative learning.

#### 3.4.4.3 Appropriate Measurement Tools

✓ **Diverse Methods:**

- Use **direct** (e.g., exams, projects) and **indirect** (e.g., surveys, portfolios) assessment tools.
- Select methods suited to the **discipline** and **outcome type** (knowledge, skills, competencies).

✓ **Clear Indicators:**

- Apply measurable benchmarks to evaluate student achievement.

#### 3.4.4.4 Structured Implementation

✓ **Defined Roles:**

- Clarify responsibilities for faculty, departments, and committees in executing assessments.

✓ **Realistic Timeline:**

- Set appropriate schedules for data collection, analysis, and reporting.

#### 3.4.4.5 Continuous Improvement Cycle

✓ **Sequential Phases:**

- Ensure a logical flow from measurement → analysis → action.

✓ **Data-Driven Enhancements:**

- Use results to refine courses and program objectives.

#### 3.4.4.6 Review & Transparency

✓ **Quality Assurance:**

- Undergo internal review and incorporate feedback.

✓ **Approval Process:**

- Secure formal endorsement from academic councils.

✓ **Regular Updates:**

- Revise the plan based on changes in:

- ❖ Program outcomes | Course content | Measurement tools | Accreditation requirements.

✓ **Stakeholder Communication:**

- Publish and share the plan with students, faculty, and accreditors.

### 3.4.5 Quality Assurance in Teaching, Learning, and Assessment Strategies

Effective quality assurance requires:

#### 1. Strategic Alignment

- Clear linkage between **teaching methods, learning activities, and assessment strategies** to ensure they collectively support program learning outcomes.
- Systematic mapping of instructional approaches to intended competencies.

#### 2. Definition of Key Strategies

- **Teaching Strategies:** Structured methodologies faculty employ to facilitate student learning (e.g., active learning, flipped classrooms, case-based instruction).
- **Learning Strategies:** Approaches students use to achieve outcomes (e.g., collaborative projects, self-directed learning).
- **Assessment Methods:** Tools to measure achievement (e.g., rubrics, portfolios, standardized exams).

#### 3. Regulatory Framework

- **Compliance with the National Authority for Evaluation and Accreditation guidelines, which define:**
  - ❖ Teaching strategies as **systematic plans** to attain educational goals.

- ❖ Learning strategies as **student-centered processes** to acquire knowledge and skills.

#### 4. Impact on Program Quality

- **Teaching/learning methods directly influence:**

- ❖ Student engagement and retention.
- ❖ Mastery of competencies.
- ❖ Program accreditation outcomes.


#### 5. Continuous Improvement


- **Regular review of strategies to ensure:**

- ❖ Relevance to evolving educational standards.
- ❖ Effectiveness in meeting learning outcomes.
- ❖ Alignment with labor market or disciplinary advancements

### 3.5 Quality of program specification

- adherence to the most recent versions of the models that have been authorized by the Education and Training Evaluation Commission.
- Matching the information in the specification of the program plan with the authorized study plan for the program.
- Including accurate and correct information in all paragraphs and items of the description.
- The authorized detailed plan for measuring the program learning outcomes and the learning outcomes matrix/methods for evaluating the program learning outcomes included in the specification should be consistent.
- "Classroom/extracurricular" teaching and learning methods and activities are suitable for the field's nature and related learning objectives.

- 
- conformity of all information in the program specification about student support and admittance to the rules and guidelines that the program or university has approved.
  - Adherence to the quality manual and associated policies and procedures in the program's quality assurance procedures.
  - All aspects of the program's authorized mission are included in the evaluation of its quality, and different measuring techniques are employed.
  - The main performance indicators for academic programs according to the latest versions of the Education and Training Evaluation Commission and a number of additional performance indicators approved for the program to measure its objectives
  - The suitability of the additional performance indicators for the objectives to be measured in terms of type, number, and measurability.
  - The appropriate identification of the annual target values, based on previous monitoring and benchmarking.
  - The suitability of the external benchmarking partner in terms of similarity in the nature of the program, its accreditation, and consistency in measurement methods and tools.
  - Preparing a description card for each performance indicator that includes all information about the indicator.
  - Attaching the approved and proven tools and forms for measuring performance indicators.
  - Coordination with the university's performance measurement unit and adherence to the criteria for selecting indicators, selecting internal/external review partners, and the target values for indicators.

- 
- Meeting the internal review levels for description and accreditation from official councils.
  - Making the approved specification available to the beneficiary sectors.
  - Reviewing the specification periodically and updating/developing it in accordance with the university's policy for approving, amending and developing academic plans and program, which specifies the time of review (annual/comprehensive) and the nature of the resulting amendments (essential/non-essential), responsibilities and levels of review and accreditation.

## 3.6 Quality of course specification

### 1. Program-Aligned Development

- Course specifications must fully align with the approved program learning outcomes and objectives.

### 2. Regulatory Compliance

- Strict adherence to the latest standards and templates issued by the Education and Training Evaluation Commission.

### 3. Comprehensive Documentation

- Complete fulfillment of all required sections and components in the course specification document.

### 4. Quality Assurance Process

- Successful completion of internal review and approval by designated academic councils.

### 5. Transparency & Accessibility

- Official publication and dissemination of approved specifications to all relevant stakeholders.

## 6. Continuous Improvement Cycle

- Regular review and updates conducted in accordance with:
- University policies for curriculum modification
- Scheduled review timelines
- Classification of amendments (essential/non-essential)
- Defined responsibilities and approval pathways

## 3.7 Operational Planning

**Annual Operational Planning Commitment:** All academic programs at the university are required to:

### 1. Develop an Annual Operational Plan

- Aligning with the university's and college's strategic executive plans
- Incorporate measurable objectives that advance the program's mission

### 2. Implement Continuous Improvement


- Address identified performance gaps from previous assessment reports
- Include targeted interventions for quality enhancement

### 3. Utilize as Governing Framework

- Serve as the primary reference for all program activities and decisions throughout the academic year
- Guide resource allocation and priority setting.

### 4. The operational plan should include improvement initiatives and activities covering the following areas:

- The educational process.
- The research process.
- Community services.

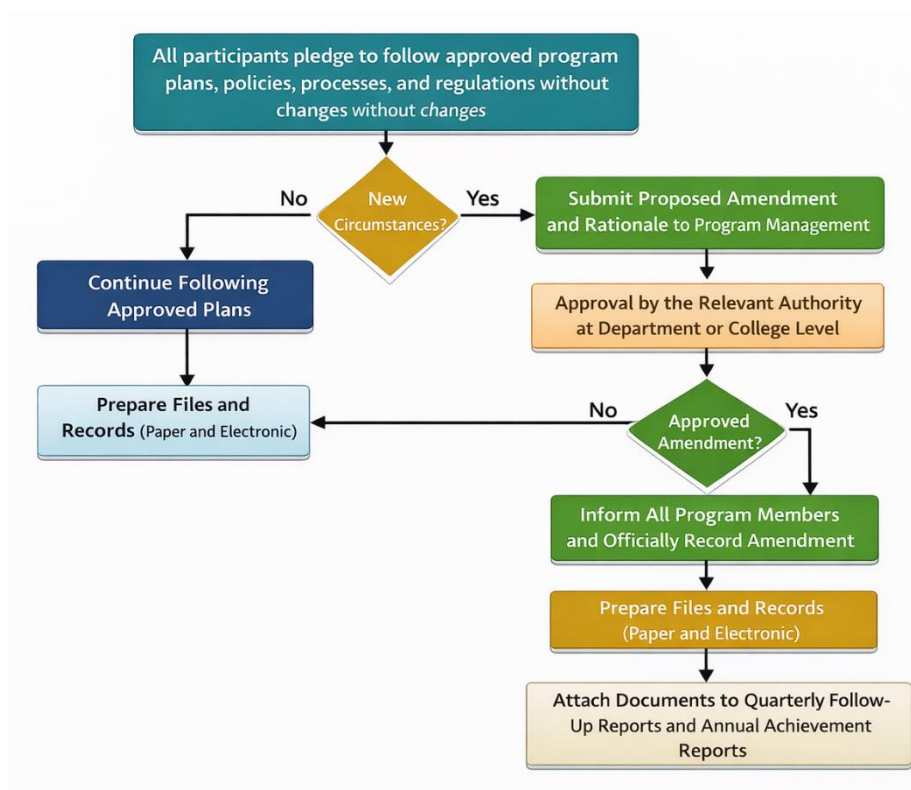
- 
- Supporting operations (student support and guidance - preparation and training - employment - learning resources, facilities and equipment).
  - Follow-up and evaluation (follow-up on the committees' implementation of their activities and evaluate their outputs).

This systematic planning process ensures alignment with institutional goals while maintaining focus on program-specific development needs.

### 3.8 Implementation Process


- All participants in the academic program pledge to follow the approved plans for the programs and the approved policies, processes, and regulations. Without making any changes.
- If new circumstances arise that necessitate exceptional measures or changes to the approved program plans, members or leaders of the program's executive committees may submit a proposed amendment along with its rationale to program management. However, implementation of the amendment cannot begin until it is approved by the relevant authority at the department or college level (depending on the scope of the change and as outlined in the program's organizational guidelines). Once approved, all program members must be informed of the amendment, and it should be officially recorded in the program's documentation."
- All members of the program and the program's executive committees are responsible for preparing files and records that include documentation of the implementation of the tasks and activities assigned to them - each according to his role - in paper and electronic form.

- All evidence and records related to the implementation of the program's operational plan initiatives and activities are attached to the quarterly follow-up reports and annual achievement reports.



### 3.9 Course file contents:

1. CV of the faculty member/members assigned to teach the course.
2. Timetable of the faculty member/members assigned to teach the course.
3. Approved course specification "Education and Training Evaluation Commission Form".
4. Matrix of course learning outcomes "CLOs" versus program learning outcomes "PLOs".
5. Matrix of course learning outcomes "CLOs" versus course topics.
6. Table of test specification of the course.
7. Written midterm/final exam paper with answer sheet.

- 
8. Models of evaluated student work attached to the performance evaluation scale Rubrics "In the case of essay questions, projects or presentations ....".
  9. A report of measuring students' achievement of course learning outcomes.
  10. Students evaluation for the course.
  11. Course results.
  12. Course report "Education and Training Evaluation Commission Form'.

At the end of the semester, there is a committee that reviews the course files and course reports.

**The program file should also be updated annually and the required files should be completed, which are:**

1. The approved program specification.
2. The approved plan for measuring the program learning outcomes.
3. The annual program report "approved"
4. The approved annual reports for measuring the program learning outcomes.
5. The approved annual reports for the annual monitoring of the program performance indicators.
6. The opinion poll reports conducted during the year "approved".
7. A record of the updates made to the program specification and their justifications.

## 3.10 Evaluation Process

The program undergoes an annual evaluation process, in addition to a comprehensive evaluation process every five years.

### 3.10.1 The annual "periodic" evaluation process produces two types of reports:

- ✓ Conducted within the improvement cycle, follow-up reports assess progress in meeting targets, highlight any difficulties in execution, and propose solutions.
- ✓ Prepared annually, achievement reports analyze the fulfillment of targets and overall progress. They include benchmarked performance evaluations, pinpoint weaknesses, and propose corrective measures for the next improvement cycle

### 3.10.2 Quality determinants of periodic reports:

The program reports should meet the requirements of good documentation, and meet the following:

- ✓ Adherence to the approved templates for "Operational Plan Follow-up and Completion Reports/Decision Reports/Program Annual Report"
- ✓ Review of the improvement proposals and priorities included in the previous year's report/the procedures implemented in this regard/the impact of the procedures implemented.
- ✓ Annual monitoring values of the relevant approved performance indicators.).
- ✓ Analysis of the results of the annual monitoring of the indicators.
- ✓ Identifying strengths and aspects that require further improvement.
- ✓ Identifying improvement priorities to be included in the improvement plan for the following year.

### 3.10.3 Comprehensive evaluation of the program:

The program's first comprehensive evaluation occurs after the inaugural cohort graduates or during initial accreditation application (to the Education and Training Evaluation Commission or other recognized bodies for international accreditation). Re-evaluations follow each accreditation renewal cycle. The assessment covers all program aspects "inputs, processes, outputs" and measures compliance with accrediting standards, backed by evidence. The self-study report (using the accreditor's template) is central to the external team's review.

### 3.10.4 The process of comprehensive evaluation for the program:

The program undergoes a full evaluation every five years, synchronized with its accreditation cycle. This evaluation thoroughly assesses all aspects of program performance, including inputs, processes, and outputs, using the standards framework of the **Education and Training Evaluation Commission**. The results inform the program's **Self-Study Report**.

### 3.10.5 Stages of the Comprehensive Evaluation Process

#### 1. Formation of Evaluation Committees

- Establish comprehensive evaluation committees and define their roles and responsibilities.

#### 2. Completion of Self-Assessment Documentation

- Finalize the program's self-assessment metrics document, including all supporting evidence for each standard.

#### 3. Preparation of the Self-Study Report and Attachments

The report must include:

- External review/accreditation visit report (if applicable) and the program's response to its recommendations.
- Documentation of the self-evaluation process (including committee members, tasks, job titles, and procedures for each standard).

- Analytical report on key performance indicators (KPIs), including performance trends and benchmark comparisons.
- Independent opinion report on self-evaluation.
- All referenced evidence uploaded to the NCAAA's electronic accreditation portal.

#### **Guidelines for Attachments:**

- Ensure all attachments directly support the report's content.
- Use concise, descriptive names for each attachment.
- Exclude non-essential files (e.g., lengthy emails, raw survey data, notes) unless requested during the reviewers' site visit.

#### **1. Fulfillment of Program Accreditation Prerequisites**

- Meet all NCAAA accreditation eligibility requirements.

#### **2. Internal Review of Documentation**

Conducted in two phases:

- **College Level:** Reviewed by the College's Development and Quality Unit.
  - **University Level:** Reviewed by the Deanship of Development and Quality.
- The program must address all internal feedback before proceeding.

#### **3. Independent External Review**

- Performed by an independent expert/team with expertise in academic accreditation and the program's discipline.
- The program must address the team's recommendations and draft improvement plans before submitting documents to NCAAA.

#### **4. NCAAA External Review**

- An NCAAA-appointed team (accreditation specialists and subject-matter experts) evaluates:
  - Compliance with accreditation standards.
  - Supporting documentation.
  - A **site visit** verifies infrastructure, labs, learning resources, and stakeholder interviews (faculty, students, beneficiaries).

## 5. Post-Review Actions

- The NCAAA team issues recommendations; the program develops a **time-bound improvement plan** prioritized by urgency.
- Progress is monitored internally (program/college/university) and via annual reports to NCAAA.

## 6. Accreditation Decision

NCAAA may grant:

- **Full accreditation** (5 years).
- **Conditional accreditation** (with stipulated improvements within a defined timeframe).

- **Denial of accreditation.**

Regardless of the outcome, the program continues **quality assurance and improvement** through:

- Designing/executing enhancement plans.
- Ongoing performance monitoring.

## 3.11 Improvement Process

The enhancement framework is driven by insights from quarterly, annual, and comprehensive evaluation reports, which identify performance gaps and improvement opportunities. During implementation, corrective actions are tailored to address deficiencies through one or more of the following approaches:

- **Immediate corrective actions** (urgent interventions)
- **Preventive measures** (proactive solutions)
- **Structured improvement/development plans** (systematic upgrades)

This ensures targeted and sustainable progress based on empirical findings.