Program Specification

(Postgraduate Programs)

Program Name:	**Doctor of Philosophy in Mathematics**
Program Code (per the Saudi Standard Classification of Educational Levels and Specializations):	???
Qualification Level:	8
Department:	**Mathematics and Statistics**
College:	**Science**
Institution:	**Imam Mohammad Ibn Saud Islamic University**
Program Specification:	New ☐ updated* ☒
Last Review Date:	08/11/2025

*Attach the previous version of the Program Specification.

Table of Contents

A. Program Identification and General Information:

1. Program's Main Location:

Main Campus for the Male Section.

2. Branches Offering the Program (if any):

King Abdullah City for the Female Section.

3. System of Study:

X Coursework & Thesis	☐ Coursework

4. Mode of Study:

X On Campus	☐ Distance Education	☐ Other ……(specify)

5. Partnerships with other parties (if any) and the nature of each: None.

- Partnership Arrangement:
- Type of Partnership:
- Duration of Partnership:

6. Professions/jobs for which students are qualified:

- ***331404 Statistics Assistant.***
- ***121117 Statistics Manager.***
- ***211102 Astronomy Specialist.***
- ***212003 Statistician.***
- ***231017 Mathematics and Statistics Professor.***

7. Relevant occupational/ Professional sectors:

8. Major Tracks/Pathways (if any): NA.

Major track/pathway	Credit hours (For each track)	Professions/jobs (For each track)

9. Exit Points/Awarded Degree (if any): NA.

Exit points/Awarded degree	Credit hours

10. Total credit hours: (54)

B. Mission, Goals, and Program Learning Outcomes

1. Program Mission:
Preparing a distinguished academic PhD program in mathematics to take part in developing the higher education system in Saudi Arabia, and to contribute to the economic and social development in Saudi Arabia.
2. Program Goals:
PG1. Providing students with a solid grounding in mathematics and specialty in one of the mathematical fields. PG2. Providing students with the background necessary to conduct scientific research in the specialty field in order to contribute to the economic and social development in Saudi Arabia. PG3. Fulfilling the needs of the universities and research centers in Saudi Arabia for faculty members and researchers in the area of mathematics. PG4. Meeting the master graduates' growing demands to pursue their studies inside the country.
3. Program Learning Outcomes:*

Knowledge and Understanding:	
K1	State the fundamentals of advanced topics in Mathematics as a rigorous living discipline in its own right.
K2	Outline the areas of specializations through studying specific topics relevant to research in mathematics.
Skills:	
S1	Apply advanced theoretical knowledge to analyze problems and develop innovative solutions.
S2	Synthesize research and theoretical writings for developing new and creative insights in the field of specialization.
S3	Communicate in a clear and concise manner orally, on paper and using IT.
S4	Make efficient use of computer for acquiring, analyzing and presenting information.
Values, Autonomy, and Responsibility:	
V1	Demonstrate integrity, professional and academic ethics, participation in finding constructive solutions to some societal issues, and a commitment to responsible citizenship.
V3	Lead teamwork with functional flexibility and effectiveness, and take responsibility for professional development, participating in developing the group's performance, and enhancing the quality of life.

* * Add a table for each track (if any)

C. Curriculum:

1. Curriculum Structure:

Program Structure	Required/ Elective	No. of courses	Credit Hours	Percentage
Course	Required	7	27	50%
	Elective	3	12	22.22%
Graduation Project (if any)	NA			
Thesis (if any)		1	15	27.77%
Field Experience(if any)	NA			
Total		11	64	100%

* Add a separate table for each track (if any).

2. Program Courses:

Level	Course Code	Course Title	Required or Elective	Pre-Requisite Courses	Credit Hours	Type of requirements (Institution, College, or Program)
Level 1	MAT 7111	Measure and Integration	Required	None	4 (4,0,0)	Program
	MAT 7121	Groups and Fields	Required	None	4 (4,0,0)	Program
	MAT 7113	Complex Analysis	Required	None	4 (4,0,0)	Program
Level 2 (PM track)	MAT 7122	Rings and Modules	Required	None	4 (4,0,0)	Program
	MAT 7115	Functional Analysis	Required	None	4 (4,0,0)	Program
	MAT 7171 or MAT 7123	Algebraic Topology or Theory of Numbers	Required	None	4 (4,0,0)	Program
Level 2 (AM track)	MAT 7131	Advanced Partial Differential Equations	Required	None	4 (4,0,0)	Program
	MAT 7141	Advanced Numerical Analysis	Required	None	4 (4,0,0)	Program
	MAT 7115 or MAT	Functional Analysis or Probability Theory	Required	None	4 (4,0,0)	Program

Level	Course Code	Course Title	Required or Elective	Pre-Requisite Courses	Credit Hours	Type of requirements (Institution, College, or Program)
	7101					
Level 3	MAT 7xxx	Elective Course 1 (List A or List B)	Elective	None	4 (4,0,0)	Program
	MAT 7xxx	Elective Course 2 (List A or List B)	Elective	None	4 (4,0,0)	Program
	MAT 7xxx	Elective Course 3 (List A or List B)	Elective	None	4 (4,0,0)	Program
Level 4	MAT 7291	Reading and Research		None	3	Program
Level 5	MAT 7399	PhD Dissertation	Required	None	15	Program
Level 6	MAT 7399	PhD Dissertation	Required	None	0	Program
Level 7	MAT 7399	PhD Dissertation	Required	None	0	Program
Level 8	MAT 7399	PhD Dissertation	Required	None	0	Program

* Include additional levels (for three semesters option or if needed).
** Add a table for the courses of each track (if any)

3. Course Specifications:

Insert hyperlink for all course specifications using NCAAA template (T-104)

https://units.imamu.edu.sa/colleges/science/sciences/math/academic_pro/Pages/PhD-MAT.aspx

4. Program learning Outcomes Mapping Matrix:

Align the program learning outcomes with the program's courses according to the desired performance levels.
(I = Introduced, P = Practiced, M = Mastered).

Course code & No.	Skills				Values, Autonomy, and Responsibility				
	K1	K2	S1	S2	S3	S4	V1	V2	V3
MAT 7111	I	I	I	I	I	I	I	I	P
MAT 7121	I	I	I	I	I	I	I	I	P
MAT 7113	I	I	I	I	I	I	I	I	P
MAT 7122	I	I	I	I	I	I	I	I	P

Course code & No.	Skills				Values, Autonomy, and Responsibility				
	K1	K2	S1	S2	S3	S4	V1	V2	V3
MAT 7115	I	I	I	I	I	I	I	I	P
MAT 7131	I	I	I	I	I	I	I	I	P
MAT 7141	P	I	I	I	M	M	M	P	P
MAT 7219	M	P	P	P	M	M	M	P	P
MAT 7223	M	P	P	P	M	M	M	P	P
MAT 7224	P	I	I	I	P	P	P	I	I
MAT 7225	P	I	I	I	P	P	P	I	I
MAT 7226	P	I	I	I	P	P	P	I	I
MAT 7227	M	P	P	P	M	M	M	P	P
MAT 7228	M	P	P	P	M	M	M	P	P
MAT 7229	P	I	I	P	M	M	M	P	P
MAT 7233	P	I	I	P	M	M	M	P	P
MAT 7251	M	P	P	P	M	M	M	P	P
MAT 7271	M	P	P	P	M	M	M	P	P
MAT 7273	M	P	P	P	M	M	M	P	P
MAT 7275	M	P	P	P	M	M	M	P	P
MAT 7277	M	P	P	P	M	M	M	P	P
MAT 7281	M	P	P	P	M	M	M	P	P
MAT 7282	M	P	P	P	M	M	M	P	P
MAT 7201	M	P	P	P	M	M	M	P	P
MAT 7203	M	P	P	P	M	M	M	P	P
MAT 7205	P	I	I	I	P	P	P	I	I
MAT 7236	P	I	I	I	P	P	P	I	I
MAT 7237	P	I	I	I	P	P	P	I	I
MAT 7239	M	P	P	P	M	M	M	P	P
MAT 7243	M	P	P	P	M	M	M	P	P
MAT 7245	P	I	I	P	M	M	M	P	P
MAT 7247	P	I	I	P	M	M	M	P	P
MAT 7253	M	P	P	P	M	M	M	P	P
MAT 7255	M	P	P	P	M	M	M	P	P
MAT 7266	M	P	P	P	M	M	M	P	P
MAT 7283	M	P	P	P	M	M	M	P	P
MAT 7287	M	P	P	P	M	M	M	P	P
MAT 7291	M	P	P	P	M	M	M	P	P
MAT 7292	M	P	P	P	M	M	M	P	P
MAT 7399 (Thesis)	M	M	M	M	M	M	M	M	M

* Add a separate table for each track (if any).

5. Teaching and learning strategies applied to achieve program learning outcomes:

Describe teaching and learning strategies to achieve the program's learning outcomes in all areas.

According to College Strategic Plan, graduates will be active learners and bilingual students, with a scientific, technological, mathematical, background and ethical values. However, in order to achieve the Strategic Plan Goals, the College developed thirteen initiatives:

The department ensures teaching quality standards through the following actions:

- At the beginning of each trimester the syllabi, are given to the students, containing courses detailed information, method of evaluation and grades, etc.
- The courses distribution is done according to the specialities of faculty staff and their wishes.
- At the beginning of each trimester two coordinators are nominated for each course, one in Female Branch and the other in Male Brach one, who are asked to communicate and coordinate between them.
- The duties of the course coordinator consist on:
  - Distribution of time according to the course contents.
  - The preparation of the exercise lists, the midterms and the final exam.
- The follow-up of good progress of the course in all the sections through the periodic meetings with course teachers and report.
- The evaluation of the teaching quality and benchmarking between parallel sections (groups) and the sections of the previous session of the same course.
- Collect the course report.
- Update the course folder.
- Annual report is prepared annually.
- Student surveys of all courses and program.
- Teaching staff evaluations of the program.
- Annual Faculty and Staff performance evaluation.

Supports for student independent work:

There are many supports for the independent scientific work of the students and here are some of them:

1) *Open Computer Labs*: The students can use these facilities to review independently a part of a course, to prepare a home work or an exam, or to access the (local) digital library;
2) *Digital library via open computer labs*: The students, in particular those preparing a Master degree, can access the (local) digital library to get free papers and theses. They read independently these resources and write reports on them;
3) *Materials provided via Blackboard platform*: The teachers use Blackboard to give students all kinds of materials related to the courses: syllabi, slides, list of exercises, solutions to exams and home works, etc… These materials can be used independently by students for a best management of the course;
4) At least six office hours provided by each teacher: Each teacher has to choose in his timetable at least six office hours in order to discuss all course issues with students;
5) Research or graduation project course: During this course, students have to work independently in order to write a report and to give an oral presentation at the end of the course;

Mini-projects and/or home works in some courses: The main goal of these assessment methods is to strength the independence work of students.

6. Assessment Methods for program learning outcomes:

Describe assessment methods (Direct and Indirect) that can be used to measure the achievement of program learning outcomes in all areas.

The program should devise a plan for assessing Program Learning Outcomes (all learning outcomes should be assessed at least once in the program's cycle).

Direct Assessment Methods:

- **National or regional exam results (developed outside the institution for use by a wide group of students using national or regional norms).**
- **Capstone Project or Course.**
- **Entrance/Exit Interviews/exams.**
- **Performance (participation in campus and/or community events, volunteer work, presentations, internships, art performances, etc).**
- **Course e-Portfolio.**

Indirect Assessment Methods:

- **Alumni Survey.**
- **Course Evaluation Survey.**
- **Employer/industry Survey.**
- **Program Advisory Committee minutes.**
- **Teaching staff surveys on the program.**
- **Observations (Information can be collected while observing "events" such as classes, social gatherings, activities, group work, study sessions, etc. Observation can provide information on student behaviours and attitudes).**
- **Syllabus Review.**
- **Second Examiner checklist (to improve it so that to include: course learning outcomes).**
- **Course report.**
- **External assessor report.**

Accreditation review.

D. Thesis and Its Requirements (if any):

1. Registration of the thesis:

(Requirements/conditions and procedures for registration of the thesis as well as controls, responsibilities and procedures of scientific guidance)

- The course MAT 7399 Ph.D. Dissertation is a required course with 15 credit hours.
- After passing the comprehensive exam, the student is required to enroll in the Ph. D. dissertation (MAT 7399).
- The academic advisor guides the students in selection of the appropriate research supervisor who has experience in that particular field.
- The academic advisor guides the student about suitability of the research project and coordinates between the student and prospective supervisor.
- Some broad guidelines can be provided form the graduate committee for the students that can be used in the selection of the supervisor and research topic.
- The Graduate studies committee appoints the supervisor for each student that fulfills the condition for the registration in the thesis.
- The thesis subject should be innovative and original.

Periodic review of thesis progress based on the supervisory evaluation process adopted by the department.

2. Scientific Supervision:

(The regulations of the selection of the academic supervisor and their responsibilities, as well as the procedures/ mechanisms of the scientific supervision and follow-up)

- The supervisor should be highly competent in the area of research with substantial background in the essential methodology for the proposed project. The department also considers supervisor's research and publication record.
- The supervisor is responsible for writing the thesis proposal.
- The supervisor should be contributed actively to the thesis.
- The supervisor should guide, coach and support the student in the research during the dissertation.
- The supervision should help the student to define the research goals, and then support him in achieving them.
- Regular meeting and discussions with the supervisor to discuss the student's progress.
- The supervisor allocates weekly office hours advertised on his /her own timetable to help the Ph.D. student on any academic problems/difficulties.
- Provide constructive and timely feedback on the scientific work of the PhD student.
- Support the student growth through encouraging training opportunities and attending scientific conferences.
- Help the student in overcoming several hurdles that he/her may occur during the thesis.
- Guide the student in data analyses, and thesis write-up in addition to the preparation of thesis presentation.

Prepare the student for thesis presentation and defense.

3. Thesis Defense/Examination:

(The regulations for selection of the defence/examination committee and the requirements to proceed for thesis defence, the procedures for defence and approval of the thesis, and criteria for evaluation of the thesis)

- **The assessment procedures for the PhD dissertation are explained in Figure 1.**
- **The mechanism for verification of the standards comprises:**

(1) ***Strategies for Obtaining Student Feedback on Effectiveness of supervising:*** **Students are asked at the end of the dissertation to fill in an anonymous questionnaire on their assessment of the dissertation. The forms will be analyzed, and the summary of results posted to the head of the department for evaluation.**

(2) ***Other Strategies for Evaluation of Supervising by the Program/Department Instructor:*** **At the end of each semester of the dissertation preparation, the supervisor should complete a report, including a summary of student questionnaire responses appraising progress and identifying changes that need to be made if necessary.**

(3) ***Processes for Improvement of Supervising:*** **Student evaluations and the supervisor's report will be used to decide improving parameters.**

(4) ***Verification of Standards of Student Achievement:*** **The dissertation is examined by two external referees. The written dissertation and the presentation will be assessed by a dissertation committee.**

(5) ***Planning arrangements for periodically reviewing dissertation work progress and planning for improvement:*** **Twice annually following the Teaching, Learning, and Supervising Assessment Process adopted by the Department Council.**

f. Description of assessment procedures (including mechanism for verification of standards)

- **The assessment procedures for the PhD dissertation are explained in Figure 1.**
- **The mechanism for verification of the standards comprises:**

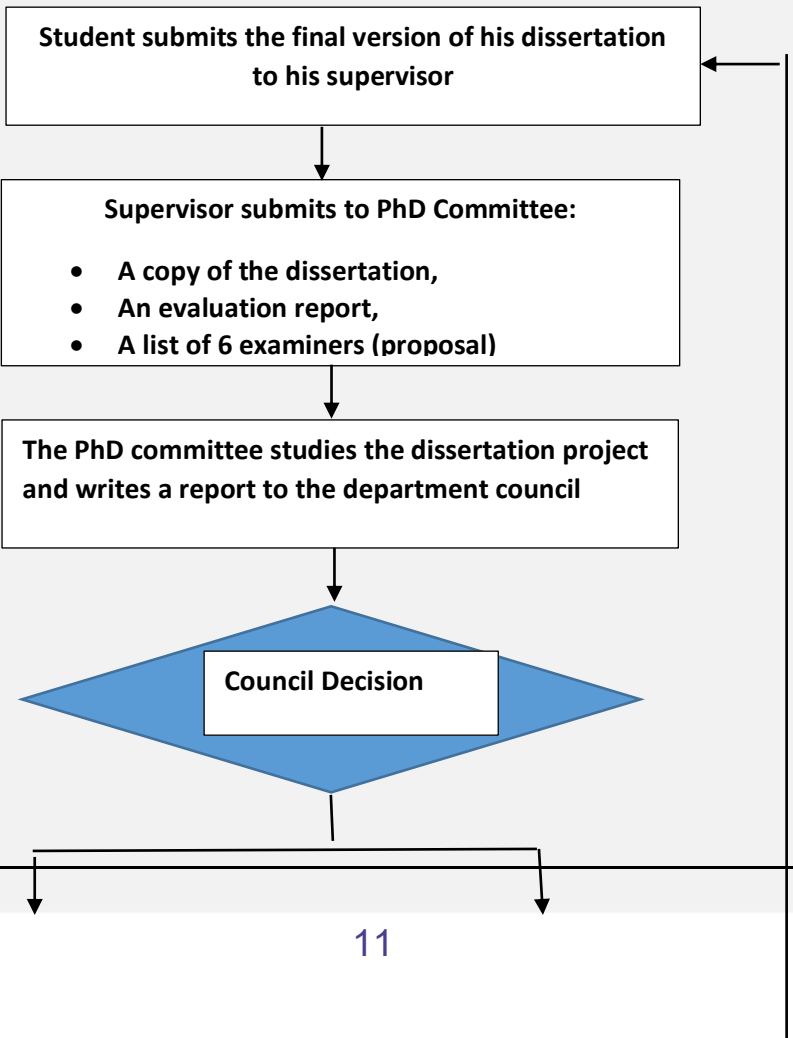
(6) ***Strategies for Obtaining Student Feedback on Effectiveness of supervising:*** **Students are asked at the end of the dissertation to fill in an anonymous questionnaire on their assessment of the dissertation. The forms will be analyzed, and the summary of results posted to the head of the department for evaluation.**

(7) ***Other Strategies for Evaluation of Supervising by the Program/Department Instructor:*** **At the end of each semester of the dissertation preparation, the supervisor should complete a report, including a summary of student questionnaire responses appraising progress and identifying changes that need to be made if necessary.**

(8) ***Processes for Improvement of Supervising:*** **Student evaluations and the supervisor's report will be used to decide improving parameters.**

(9) ***Verification of Standards of Student Achievement:*** **The dissertation is examined by two external referees. The written dissertation and the presentation will be assessed by a dissertation committee.**

(10) ***Planning arrangements for periodically reviewing dissertation work progress and planning for improvement:*** **Twice annually following the Teaching, Learning, and Supervising Assessment Process adopted by the Department Council.**



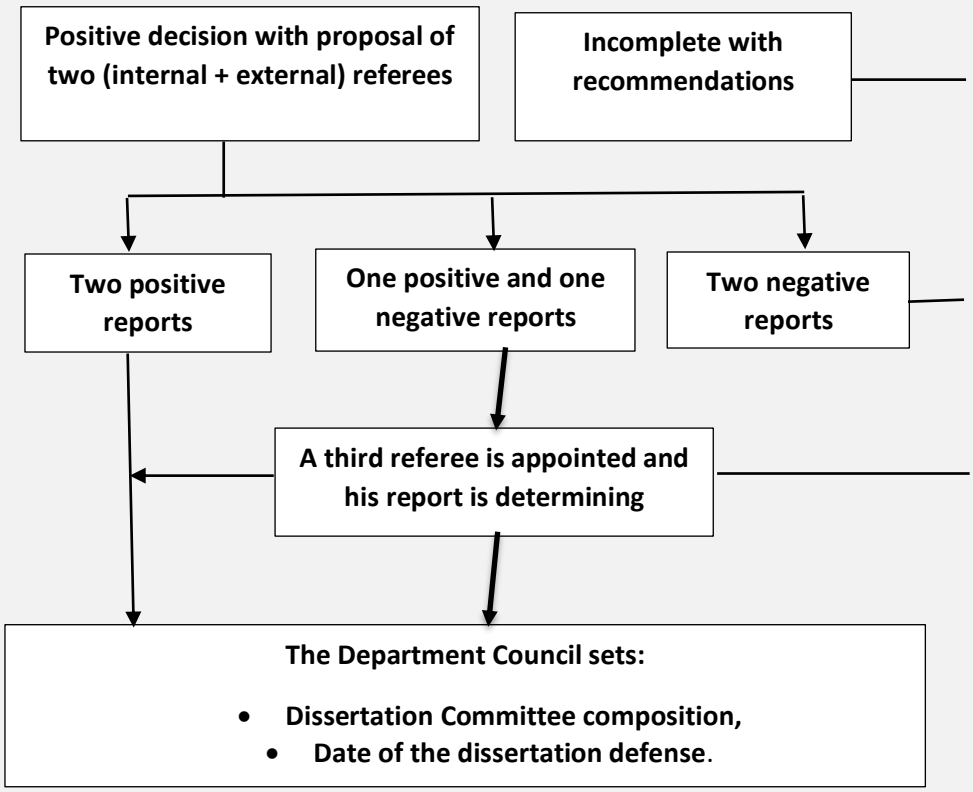


Figure 1 –Assessment Procedures for the Dissertation

H. Student Admission and Support:

1. Student Admission Requirements:

In addition to the uniform regulations of graduate studies in Saudi universities, applicants to the PhD program must satisfy the following:

- **Have a master degree in mathematics from an accredited Saudi university, or a recognized international university, with a grade-point average (GPA) of 3.75 or higher on a scale of 5.00 or equivalent.**
- **Pass the written test arranged by the Mathematics Graduate Committee (MGC) in the department.**
- **The written test may be waived if the applicant took the GRE math-subject text and earned at least a score of 500 during the two last years.**
- **Pass an interview administered by MGC.**
- **Earn a score of at least 50 in the TOEFL IBT test, or the equivalent score of any similar recognized international tests.**
- **Enroll as a full-time student.**
- **The student should provide a written statement of purpose.**

Selection Criteria:

Applicants will be selected according to the following criteria:

1) **50% for the GPA in master's degree.**
2) **25% for the written test.**
3) **25% for the interview**

Study Policies:

In addition to items 20-23 and 32-40 under the unified regulations for graduate studies in Saudi universities, students comply with the following policies:

1) **The department may require passing some deficiency courses, depending on the academic records of the applicant.**
2) **All deficiency courses must be completed within one academic year before enrolling in the PhD program.**
3) **Every student enrolled in the program will be assigned an academic advisor by the Mathematics Graduate Committee (MGC) to guide the student in the degree plan and provide help in issues related to the academic program.**
4) **The study scheme in the program is based on coursework and a dissertation.**
5) **Seventy credit hours are required for the PhD program, distributed in four academic years.**
6) **The duration of study to obtain the degree is not less than four academic years but not more than five academic years. However, the college council may recommend extension depending on the student's situation with no more than one academic year.**
7) **The program consists of eleven courses – with 4-5 credit hours for each –including comprehensive exams, and a dissertation of 22 credit hours.**
8) **After passing the first trimester courses, the student choose one of the two tracks available in the program: pure mathematics track (PM) or applied mathematics track (AM).**
9) **After passing the first and the second trimester's courses, the student will be assigned a research supervisor to guide and provide help in completing the coursework requirements, and determine the specific field of the dissertation.**
10) **With the approval of the academic supervisor, the student in the third and fourth trimesters enrolls in three elective courses.**
11) **The student may not choose a course that has been already studied by the student during the master's program, or any course equivalent to it.**
12) **A student who fails a mandatory course is required to retake it and pass it.**
13) **A student who fails an elective course may substitute it with another elective.**
14) **In the fifth and sixth trimesters, and after completing all required courses, the student enrolls in the courses: "Reading and Research (1)" (MAT 7291), and "Reading and Research (2)" (MAT 7292), respectively.**
15) **The comprehensive examination consists of two written exams and one oral exam.**
16) **The two written exams must be in the following subjects: "Analysis" for all students, and either "Algebra" for PM track students, or "Partial Differential Equations & Numerical Analysis" for AM track students.**
17) **The student is required to pass the two comprehensive written exams and the oral one after the sixth trimester.**
18) **A student who fails in one of the written comprehensive written exams or both exams**

can retake the exam at most once. A student who fails in the oral comprehensive written exam can retake the exam at most once.

19) After passing the three comprehensive exams, the student enrolls for the PhD dissertation.

20) Students of special needs may be allowed to enroll in only four courses for each academic year, after the approval of the supervisor and the Mathematics Graduate Committee.

21) The language of study, exams, and dissertation is English.

Grading Policy:

1) The minimum passing score for a course is 70 on a scale of 100.

2) The minimum passing score for each comprehensive exam is 70 on a scale of 100.

3) Comprehensive exams are offered twice a year.

4) The Mathematics Graduate Committee appoints a subcommittee to prepare and administer the written exam in each subject. The subcommittee will consist of at least three graduate faculty members who are eligible to supervise PhD dissertations.

5) Subcommittees for comprehensive oral exams are appointed by the Mathematics Graduate Committee. They consist of three faculty: the Thesis advisor and two other faculty members who are eligible to supervise PhD dissertations, provided that one of them is the dissertation supervisor of the examiner.

Dismissal:

In addition to the unified regulations for graduate studies in Saudi Universities, the student will be subject to dismissal in the following cases:

1) If the student has been accepted to the program, but didn't register during the official time of registration.

2) If the student's GPA in the deficiency courses was below the equivalent of "very good" during two trimesters.

3) If the student withdraws or ceases attending class for one semester, without a legitimate excuse approved by departmental.

4) If the student's GPA is below the equivalent of "very good" in two consecutive trimesters".

5) If the student fails twice in one of the courses.

6) If the student fails twice in one of the comprehensive written exams.

7) If the student fails twice in the comprehensive oral exam.

8) If the dissertation is disapproved by the dissertation committee, or has been rejected after discussion.

- **9) If the students did not complete all the requirements of the degree within five years.**

2. Guidance and Orientation Programs for New Students:

(Include only the exceptional needs offered to the students of the program that differ from those provided at the institutional level).

None

3. Student Counseling Services:

(Academic, professional, psychological and social)

(Include only the exceptional needs offered to the students of the program that differ from those provided at the institutional level)

- **The lecturer for each course allocates 6 office hours per week advertised on his /her own timetable, and reserved as part of his/her teaching schedule to help the students on any academic problems/difficulties.**
- **The student is able to get individual consultation and academic advice appointment with teaching staff via e-mail or phone calls.**
- **A list of teaching staff members with their room numbers, their phone numbers and their e-mail addresses are given in the Department website.**
- **Each admitted student in the program has an academic advisor who can help him (her) to select courses and locate resources.**
- **Academic Advisors are assigned to admit students by MGC upon starting the program to guide and help him (her) throughout his (her) academic program.**
- **The Academic Advisor is trained to know all degree requirements from beginning to end, and can assist him (her) in planning courses in an appropriate sequence.**

On the other hand, a departmental advisor can provide information, advice and support in relation to accommodation, emotional difficulties, assessment of needs and provision of support related to disability, student funding, general welfare, student discipline and complains and part-time work.

4. Special Support:

(Low achievers, disabled, and talented students).

Student with special needs or disabilities may be allowed to take only four courses (instead of six courses) in a year upon the consent of (MGC) and the supervisor.

E. Faculty and Administrative Staff:

1. Needed Teaching and Administrative Staff:

Academic Rank	Specialty		Special Requirements / Skills (if any)	Required Numbers		
	General	Specific		M	F	T
Professor	Mathematics	Pure/Applied	None	10	5	15
Associate Professor	Mathematics	Pure/Applied	None	10	5	15
Assistant Professor	Mathematics	Pure/Applied	None	5	5	10
Technicians and Laboratory Assistants	None			0	0	0
Administrative and Supportive Staff	None			0	0	0
Others (specify)	None			0	0	0

F. Learning Resources, Facilities, and Equipment:

1. Learning Resources:

Learning resources required by the program (textbooks, references, e-learning resources, web-based resources, etc.)

For the planning and acquisition of learning resources the MGC proceeds as follows:

STEP 1: For each course the MGC assigned a faculty members committee to do the followings:

- **Course description (preliminary syllabus),**
- **Recommend Lists of Required Textbooks, Essential References Materials (Journals, Reports, *etc.*), Recommended Textbooks and Reference Material (Journals, Reports, *etc.*), Electronic Materials (eg. Web Sites, social media, Blackboard, etc.), and other learning material such as computer-based programs/CD, professional standards or regulations and software.**

STEP 2: MGC collects learning resources of all courses and submits the required lists to the Head of the department to get the approbation of the department council.

STEP 3: After the department council approbation the Department Head asks the College Dean to provide the Required lists of Learning Resources through the University Central Library and/or the IT Deanship.

2. Facilities and Equipment:

(Library, laboratories, classrooms, etc.)

For the planning and acquisition resources for library, laboratories, and classrooms the MGC proceeds as follows:

STEP 1: Evaluation of the locals assigned for graduated programs: Library (equipped with textbooks and references provided by the Central Library), Laboratories (equipped with appropriate computers and software), and classrooms.

STEP 2: In the shortage case of supplies the MGC will report that to the Department Head in order to ask the College Dean to provide such supplies through the University Central Library

and/or the IT Deanship.

3. Procedures to ensure a healthy and safe learning environment:

(According to the nature of the program)

NA

G. Program Quality Assurance:

1. Program Quality Assurance System:

Provide a link to the quality assurance manual.

Program Quality Assurance System

Provide online link to quality assurance manual

https://imamuedusa-my.sharepoint.com/:b:/g/personal/alakhalil_cloud_imamu_edu_sa/EZA2RBjov-dFj1uzGyvHQN8BxmRp20mCEwZ1oWr8wJsbvQ?e=MhYenb

Program review and its development is periodically assessed through the following processes:

- Courses reports are submitted to the program manager every trimester.
- Appropriate teaching staff committee is in the charge of assessment and modification.
- Prepare and monitor the annual program report.
- Conduct and analyze surveys opinion of the students about the courses and the program.
- Conduct and analyze surveys opinion of the employers about the program.
- Program manager reviews the proposals submitted by the previous committees and makes appropriate decision after approbation of the department council.
- Monitor a global review for the development of the program periodically each five years if necessary.

All the previous processes follow the Teaching\Learning Quality Assurance Process Diagram:

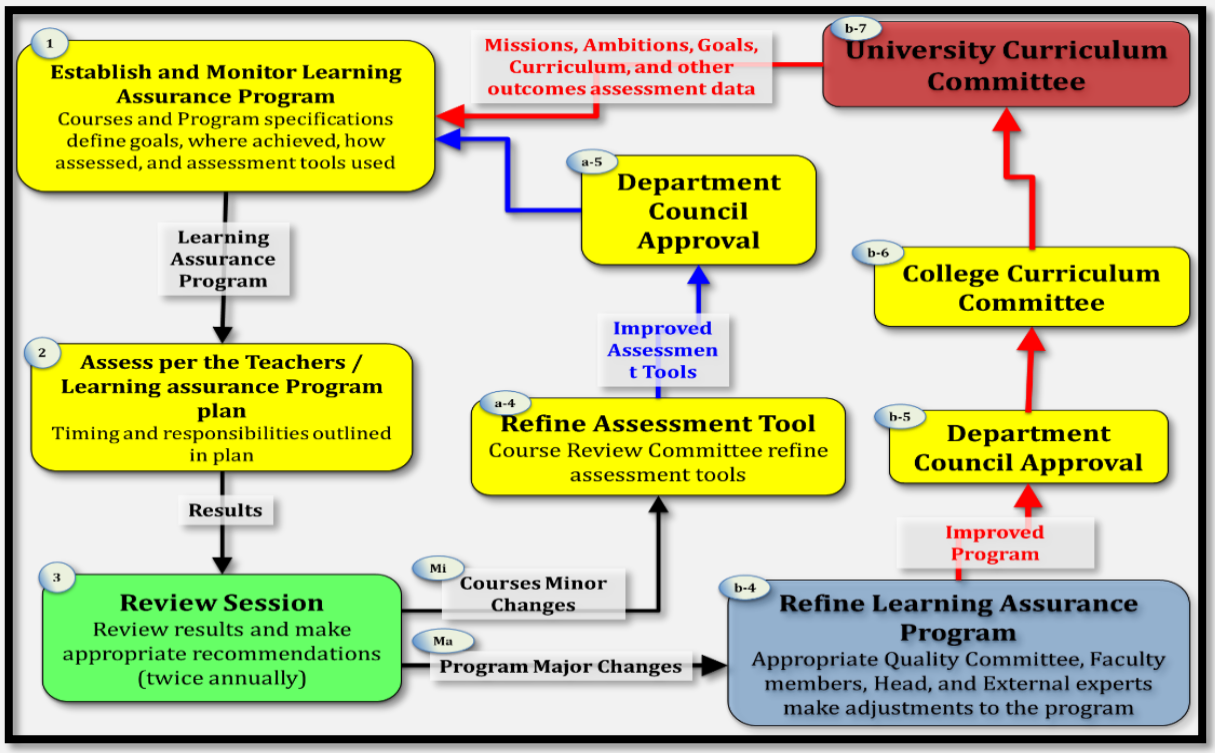


Figure 2 - Teaching\Learning Quality Assurance Process Diagram

2. Program Quality Monitoring Procedures:

- **At the end of each trimester the course instructor should complete a course report, including a summary of student questionnaire responses appraising progress and identifying changes (course contents and/or textbooks and/or references) that need to be made if necessary. In the case where changes are recommended the MGC report that to the Department Head in order to take actions.**

Students are asked at the end of this course to fill in an anonymous questionnaire on their assessment of the course. The forms will be analyzed, and the summary of results will be reported to the Department Head for evaluation and then to take actions.

3. Procedures to Monitor Quality of Courses Taught by other Departments:

NA

4. Procedures adopted to ensure consistency between the program's sections (male and female sections, if any).

- **The students of both campuses are taught at the same time, in the same section, and by the same teacher.**

Furthermore, they have the same exams, homeworks, and required reports.

5. Assessment Plan for Program Learning Outcomes (PLOs):

NA

6. Program Evaluation Matrix:

Evaluation Areas/Aspects	Evaluation Sources/References	Evaluation Methods	Evaluation Time
leadership	dean	evaluation report	end of academic year
effectiveness of teaching & assessment	program leader, faculty, independent reviewers, students	surveys, interviews, visits	end of the trimester, during the trimester

Evaluation Areas/Aspects (e.g., leadership, effectiveness of teaching & assessment, learning resources, services, partnerships, etc.)
Evaluation Sources (students, graduates, alumni, faculty, program leaders, administrative staff, employers, independent reviewers, and others.
Evaluation Methods (e.g., Surveys, interviews, visits, etc.)
Evaluation Time (e.g., beginning of semesters, end of the academic year, etc.)

7. Program KPIs:*

The period to achieve the target (____) year(s).

No.	KPIs Code	KPIs	Targeted Level	Measurement Methods	Measurement Time
1	KPI-PG-1	Percentage of achieved indicators of the program operational plan objectives	85%	Surveys, Department data	Yearly starting from the first promotion
2	KPI-PG-2	Students' Evaluation of quality of learning experience in the program	4.60	surveys	Twice per year
3	KPI- PG-3	Students' evaluation of the quality of the courses	4.50	surveys	Twice per year
4	KPI-PG-4	Students' evaluation of the quality of scientific supervision	4.60	surveys	Yearly starting from the first promotion
5	KPI-PG-5	Average time for students' graduation	7 years	Graduation data	Yearly starting from the first promotion
6	KPI-PG-6	Rate of students dropping out of the program	0.3	Graduation data	Yearly starting from the first promotion
7	KPI-PG-7	Graduates' employability	90%	Graduation Unit	Yearly starting from the first promotion
8	KPI-PG-8	Employers' evaluation of the program graduates' competency	4.80	surveys	Yearly starting from the first promotion
9	KPI-PG-9	Students' satisfaction with the provided services	4.60	surveys	Yearly
	KPI-PG-10	Ratio of students to faculty members	14.1	Department data	Yearly
10	KPI-PG-11	Percentage of faculty members' distribution based on academic ranking	20% Assis. Prof. 30% Assoc. Prof 50% Prof.	Department data	Yearly
11	KPI-PG-12	Proportion of faculty members	0.1	Department data	Yearly

No.	KPIs Code	KPIs	Targeted Level	Measurement Methods	Measurement Time
		leaving the program			
12	KPI-PG-13	Satisfaction of beneficiaries with learning resources	4.60	surveys	Yearly
13	KPI-PG-14	Satisfaction of beneficiaries with research facilities and equipment	4.60	surveys	Yearly
14	KPI-PG-15	Percentage of publications of faculty members	80%	Department data	Yearly
15	KPI-PG-16	Rate of published research per faculty member	2.00-4.00	Department data	Yearly
16	KPI-PG-17	Citations rate in refereed journals per faculty member	60	Department data	Yearly
17	KPI-PG-18	Percentage of students' publication	30%	Department data	Yearly starting from the first promotion
18	KPI-PG-19	Number of patents, innovative products, and awards of excellence	1.00	Department data	Yearly
19	KPI-PG-1	Percentage of achieved indicators of the program operational plan objectives	85%	Surveys, Department data	Yearly starting from the first promotion

*including KPIs required by NCAAA

H. Specification Approval Data:

Council / Committee	
Reference No.	
Date	