



# Program Specification

— (Postgraduate)

Program Name:	Master Degree in Physics
Program Code (as per the Saudi Standard Classification of Educational Levels and Specializations):	MSc 053301
Qualification Level:	7
Department:	Physical Sciences
College:	Science
Institution:	Jazan University
Program Specification:	New <input checked="" type="checkbox"/> updated* <input type="checkbox"/>
Last Review Date:	write here

\*Attach the previous version of the Program Specification.

## Table of Contents

A. Program Identification and General Information .....	3
B. Mission, Goals, and Program Learning Outcomes .....	4
C. Curriculum .....	5
D. Thesis and Its Requirements (if any) .....	9
H. Student Admission and Support: .....	10
E. Faculty and Administrative Staff: .....	13
F. Learning Resources, Facilities, and Equipment: .....	13
G. Program Quality Assurance: .....	14
H. Specification Approval Data: .....	19





## A. Program Identification and General Information:

### 1. Program's Main Location:

Physics Department, Main Campus, College of Science, Jazan University

### 2. Branches Offering the Program (if any):

Non

### 3. System of Study:

☒ Coursework & Thesis

☐ Coursework

### 4. Mode of Study:

☒ On Campus

☐ Distance Education

☐ Other .....(specify)

### 5. Partnerships with other parties (if any) and the nature of each: Non

- Partnership Arrangement:

- Type of Partnership:

- Duration of Partnership:

### 6. Professions/jobs for which students are qualified:

- Education sector (public and private)

- Research laboratories and research centers

- Academic institutions as researchers and/or faculty members

### 7. Relevant occupational/ Professional sectors:

- Industrial sector

- Work as scientists and/or consultants in industrial sectors.

### 8. Major Tracks/Pathways (if any): Non

Major track/pathway	Credit hours (For each track)	Professions/jobs (For each track)
1.		
2.		
3.		
4.		

### 9. Total credit hours: (.....)



## B. Mission, Goals, and Program Learning Outcomes

### 1. Program Mission:

Innovation and excellence in graduate physics education and research to prepare highly skilled graduates that fulfill the development and community needs.

### 2. Program Goals:

1. Provide high-quality of advanced education consolidated with training to extend the frontiers of physics science and encourage innovation.
2. Implement high-quality research programs in physics and related fields.
3. Provide an outstanding community service that contributes to the development of society.

### 3. Program Learning Outcomes:\*

#### Knowledge and Understanding:

- |    |                                                                                                  |
|----|--------------------------------------------------------------------------------------------------|
| K1 | Describe theories, techniques, practices, materials, and terminology relevant to physics topics. |
| K2 | Discuss physical phenomena and their recent developments in various research fields.             |

#### Skills:

- |    |                                                                                                                                  |
|----|----------------------------------------------------------------------------------------------------------------------------------|
| S1 | Apply theories and creative solutions to solve physical problems.                                                                |
| S2 | Build critical thinking skills to provide reasonable justification analysis.                                                     |
| S3 | Demonstrate abilities in qualitative and quantitative methods for analyzing and reporting data using computational and IT tools. |
| S4 | Develop sufficient skills to conduct advanced experimental work and high-level graduate research (theoretical and experimental). |

#### Values, Autonomy, and Responsibility:

- |    |                                                           |
|----|-----------------------------------------------------------|
| V1 | Adhere to the ethical principles and safety requirements. |
| V2 | Demonstrate ability of independent lifelong learning.     |
| V3 | Show effective individual responsibility and teamwork.    |

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

## C. Curriculum:

### 1. Curriculum Structure:

Program Structure	Required/ Elective	No. of courses	Credit Hours	Percentage
<b>Course</b>	Required	6	18	54.55%
	Elective	3	9	27.72%
Graduation Project (if any)		-	-	-
Thesis (if any)		1	6	18.18%
Field Experience (if any)		-	-	-
Others (.....)		-	-	-
<b>Total</b>		10	33	100%

\* Add a separated 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)
<b>Level 1</b>	600PHYS	Mathematical Physics	Required	---	3	---
	601PHYS	Classical Physics	Required	---	3	---
	602PHYS	Classical Electrodynamics	Required	---	3	---
<b>Level 2</b>	603PHYS	Quantum Mechanics	Required	---	3	---
	604PHYS	Statistical Physics	Required	---	3	---
	6xxPHYS	Elective Course 1	Elective	---	3	---
<b>Level 3</b>	6xxPHYS	Elective Course 2	Elective	---	3	---
	6xxPHYS	Elective Course 3	Elective	---	3	---
	695PHYS	Research Seminar	Required	---	3	---
<b>Level 4</b>	699PHYS	Thesis	Required	---	6	---

\* 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://www.jazanu.edu.sa/ar/colleges/sci/physics-department/msc-courses>

#### 4. Program learning Outcomes Mapping Matrix:

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

Course code & No.		Program Learning Outcomes								
		Knowledge and understanding		Skills				Values, Autonomy, and Responsibility		
		K1	K2	S1	S2	S3	S4	V1	V2	V3
Mathematical Physics	600PHYS	I	I	I		I				I
Classical Physics	601PHYS	I	I	I					I	I
Classical Electrodynamics	602PHYS	P		P	P	P				P
Quantum Mechanics	603PHYS	P		P		P				P
Statistical Physics	604PHYS	M	M	M					M	M
Computational Physics	610PHYS		M	M	M	M				M
Physics Laboratory	611PHYS	M	M			M	M	M		M
Atomic and Molecular Spectroscopy	620PHYS	M	M	M	M				M	
Quantum Optics	621PHYS	M	M	M					M	
Plasma Physics	622PHYS	M	M	M					M	M
Solid State Physics	640PHYS	M	M	M						M
Materials Science	641PHYS	M	M	M	M	M				M
Magnetism and Superconductivity	642PHYS	M	M	M					M	M
Nuclear Structure and Spectroscopy	650PHYS	M	M	M					M	
Radiation Physics	651PHYS	M	M	M					M	
Quantum Field Theory	660PHYS	M		M						M
Particle Physics	661PHYS	M	M	M		M			M	
Special Topics in Physics	665 PHYS	M	M	M	M	M				M
Research Seminar	695PHYS	M	M	M	M	M	M		M	M
Thesis	699PHYS	M	M	M	M	M	M	M	M	M

\* Add a separated 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 learning outcomes in all areas.

	Code	Program Learning Outcomes	Teaching Strategies
Knowledge and Understanding			
Knowledge	K1	Describe theories, techniques, practices, materials, and terminology relevant to physics topics	Lectures, Tutorials, and Interactive Discussions.
Understanding	K2	Discuss physical phenomena and their recent developments in various research fields	
Skills			
Cognitive Skills	S1	Apply theories and creative solutions to solve physical problems	Lectures, Problems, and Interactive Discussions
	S2	Build critical thinking skills to provide reasonable justification analysis.	
Communication and ICT Skills	S3	Demonstrate abilities in qualitative and quantitative methods for analyzing and reporting data using computational and IT tools.	Lectures, Problems, Presentation, Written essay, Interactive Discussions, and Seminars
Practical and Physical Skills	S4	Develop sufficient skills to conduct advanced experimental work and high-level graduate research (theoretical and experimental).	Hands -on practice, Expository Discovery and Interactive Discussions
Values, Autonomy and Responsibility			
Values	V1	Adhere to the ethical principles and safety requirements.	Hands -on practice, Expository Discovery and Interactive Discussions
Autonomy	V2	Demonstrate ability of independent lifelong learning.	Expository and Discovery, and Interactive Discussions.
Responsibility	V3	Show effective individual responsibility and teamwork.	Expository and Discovery, and Interactive Discussions.



## 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 measures:

- ✚ This type of assessment will rely on normal tests and exams and utilize rubrics that were prepared for both grading and assessment at the program level.
- ✚ The Rubrics will provide a suitable mean for faculty members to have a consistent manner of evaluation of all kinds of assessment questions based on their rubrics.
- ✚ With rubrics, the evaluation will be done systematically and consistently by any faculty member.
- ✚ Rubrics also will help students to understand the expectation of the department to gauge student progress over time, and to provide a basis for faculty discussions concerning possible areas for program improvement.
- ✚ Moreover, with Rubrics students will know in prior the judgment procedure of their achievements in all kinds of assessment.

### **The following are some of the practiced rubrics**

Problem solving -Essay questions - Derivation and formulation - Presentation – Communication - Lab reports - Group work in lab and assignments - Evaluation of project work by supervisor and referee -Project report.

### Indirect Measures

- ✚ Every semester course evaluation by students (CES) is managed and reported for both course reports as well as Annual Program Report (APR).
- ✚ Two other important surveys are conducted every semester for evaluation of student experience (EES) at the middle of the program (3<sup>th</sup> level) and program evaluation survey (PES) at the end of the program (4<sup>th</sup> level)
- ✚ Faculty members` opinions are also taken through a Faculty Members` satisfaction Survey (annually).
- ✚ Another important survey is currently planned known as Exit Survey with which the expected graduate students will be targeted to specifically assess the Program Learning Outcomes and get a solid reflection on the gained knowledge, skills, and competence.
- ✚ Students` evaluation of the quality of academic supervision at the end of the program ( 4<sup>th</sup> level).
- ✚ Moreover, on a periodic basis the department will solicit feedback on graduate skills from Alumni and their employers using either surveys or focus groups. These mechanisms may allow Physics Program to evaluate and improve the target of student outcomes to meet the requirements of the job market.

In all above-mentioned Surveys, Physics Program sets a threshold level of score 3 out of 5 for all responses on these surveys for satisfactory achievements.



## 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 graduate student shall submit her/his proposal, if any, to the Department after she/he fulfills the admission requirements and a statement on the topic of the master's thesis from King Fahad National Library. Upon recommending the proposal's approval, the Department Council shall suggest the name(s) of the supervisor and co-supervisor, if any, or the names of the supervising committee members and its chairperson. The proposal shall be submitted to and approved by the College Council before the Deanship of Graduate Studies approval.

✚ Topics chosen for a Master's Degree should be original and authentic.

Master's dissertations are written in English based on the recommendation of the Department and the Deanship of Graduate Studies Councils. The submitted dissertation should include a detailed synopsis written in Arabic

### 2. Scientific Supervision:

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

✚ Dissertations shall be supervised by Professors and Associate Professors among the University staff members. Assistant Professors can supervise a Master's degree if two years have passed since being appointed in her/ his rank, and have written at least two refereed papers in her/his major, whether published or accepted for publication.

✚ Qualified and distinguished staff members from outside the University may supervise dissertations through resolution by the University Council based on recommendations by the Department and the Deanship of Graduate Studies Councils.

✚ A staff member from other departments may co-supervise a dissertation depending on the nature of the work, provided that the main supervisor is from the department in which the student is studying.

✚ A supervisor, whether solely or in collaboration with others, can concurrently supervise a maximum of four dissertations. When extremely necessary, the number shall be raised to five, based on the Department Council recommendation and approval of the College and the Deanship of Graduate Studies Councils. Each dissertation is equivalent to one hour in the staff member's teaching load if s/he is the only supervisor or the main.

✚ Upon terminating the University service of the supervisor or her/his inability to continue with the supervision of the dissertation, the Department proposes a substitute supervisor to be concurred by the College Council and approved by the Deanship of Graduate Studies Council.

✚ The supervisor shall submit a detailed report at the end of each semester to the Department Chairperson regarding the progress of the student's research study. A copy of the report shall be sent to the Dean of Graduate Studies.

✚ Upon completing the dissertation by the student, the supervisor submits a report to the Department Chairperson in this respect to continue with the procedures specified by the Council of the Deanship of Graduate Studies.

If proven that the student is not serious about her/his study, or upon violating any of the research duties based on a report submitted by the supervisor, the Department shall send her/him a warning letter. If the student does not correct the warning causes, her/his registration shall be cancelled by the Council of the Deanship of Graduate Studies based on the Department Council recommendation.



### 3. Thesis Defense/Examination:

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

- I.** The examination board is formed by the resolution of the Deanship of Graduate Studies Council based on the recommendations of the Department and College Councils.
- II.** The Master's examination board should fulfill the following:
  1. An odd number of examiners shall be selected, and the supervisor is its reporter.
  2. The minimum number of examiners is three provided that the supervisor and the co-supervisor, if any, do not constitute a majority.
  3. The board members are subject to the requirements of dissertation supervision.
  4. A professor, or at least an associate professor, should be on the examination board.
  5. Resolutions are taken upon the approval of at least two thirds of the board members.
- III.** If the dissertation supervisor fails to be on the examination board due to her/his death, service termination, or on a long period mission abroad, the Department shall propose a substitute approved by the College and the Deanship of Graduate Studies Councils.
- IV.** A report signed by all examiners shall be submitted to the Department Chairperson within one week of the examination with one of the following recommendations:
  1. Accepting the dissertation and recommending the degree award.
  2. Accepting the dissertation and suggesting some changes without being re-examined. One of the examination board members shall be assigned to award the degree provided that the corrections are made within a maximum period of three months from the examination date; the University Council is entitled to make exceptions.
  3. Re-examining the dissertation after the corrections are made within a period specified by the Council of the Deanship of Graduate Studies based on the Department Council recommendation. The maximum period is one year from the examination date.
  4. Not accepting the dissertation. Each examiner is entitled to make reservations and state her/his contradictory viewpoint in a detailed report submitted to the Department Chairperson and the Dean of Graduate Studies within two weeks from the examination date.
- V.** The Department Chairperson shall submit the report of the examination board to the Dean of Graduate Studies within a minimum period of three weeks from the examination date.
- VI.** Recommendation of degree award shall be submitted by the Dean of to the University Council to decide on the matter.

## H. Student Admission and Support:

### 1. Student Admission Requirements:

- I.** University Council shall determine the number of students admitted each year to graduate studies programs based on the recommendation of the Council of the Deanship of Graduate Studies, and the proposal of the concerned departments and colleges.
- II.** For admission to Graduate Studies, the applicant must fulfill the following requirements:
  1. To be of Saudi nationality or has an official scholarship if the applicant is non-Saudi.
  2. To have a university degree from a Saudi university or another equivalent accredited university.
  3. To be medically and morally eligible.
  4. To submit two recommendation letters from staff members who taught him/her.



5. To obtain a written undertaking of approval from employer if the applicant is an employee.
6. B.Sc. Grade 3.75 or higher in the subject.
7. English language proficiency (TOEFL 400)
8. Interview (Pass)

**III.** For admission to the Graduate Studies program for a Master's Degree, the final grade of the applicant in the university must be «Good» or better and «Very Good» or better for Physics courses. The Council of the Deanship of Graduate Studies, based on the Department Council recommendation and College Council approval may add other requirements deemed necessary for admission.

**IV.** A student may be admitted to a Master's program in a field different from her/his major based on the concerned Department and College Councils recommendation, and the approval of the Council of the Deanship of Graduate Studies.

**V.** For admission to the Master's program, the concerned department may specify that the applicant must undertake a number of complementary courses from an earlier stage, in a period not more than three semesters, taking into consideration the following:

1. The complementary course must be first of a grade of 'Good' or better.
2. The cumulative GPA in the complementary courses must be (Very Good) or better.
3. Passing the complementary courses before registering for the graduate studies program. The department may allow registration in graduate studies only if one or two complementary courses remain to be studied.
4. The period of the complementary courses is not included in the period specified for obtaining the degree.
5. The complementary courses are not included in the calculation of the cumulative GPA of graduate studies.

✚ Deanship of Graduate Studies shall be responsible for the applicants' admission and registration in coordination with the Deanship of Admission and Registration.

✚ The student must not enroll in two graduate studies programs simultaneously.

<https://www.jazanu.edu.sa/ar/administration/deanships/deanship-graduate-studies>

[https://www.jazanu.edu.sa/sites/default/files/2022-06/jaz-1444-01-ds-01\\_002.pdf](https://www.jazanu.edu.sa/sites/default/files/2022-06/jaz-1444-01-ds-01_002.pdf)

[https://www.jazanu.edu.sa/sites/default/files/2022-06/jaz-1444-01-ds-01\\_01.pdf](https://www.jazanu.edu.sa/sites/default/files/2022-06/jaz-1444-01-ds-01_01.pdf)

<http://deanships.jazanu.edu.sa/sites/en/adm/Pages/AdmissionofFreshmanyearstudents.aspx>

<http://deanships.jazanu.edu.sa/adm/PublishingImages/flge/%D8%AF%D9%84%D9%8A%D9%84%20%D8%A7%D9%84%D8%B7%D8%A7%D9%84%D8%A8%201.pdf>

<http://deanships.jazanu.edu.sa/adm/Documents/%D8%AF%D9%84%D9%8A%D9%84%20%D8%A7%D9%84%D8%B7%D8%A7%D9%84%D8%A8%20%D9%84%D9%84%D8%AE%D8%AF%D9%85%D8%A7%D8%AA%20%D8%A7%D9%84%D8%A5%D9%84%D9%83%D8%AA%D8%B1%D9%88%D9%86%D9%8A%D8%A9.pdf>

## 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).

The orientation program for students is held every year. The department Head presides over a welcoming session for new students attended by almost all the faculty members and administration staff. The Orientation program is to familiarize new students the learning environment and provide opportunities for teaching staff to introduce themselves and their specialties to new students. Essential information needed to successfully learn at JU





as learning environment and spaces, courses coordinators, classroom places, online learning, activities and who should students ask/contact when they have questions or problems. The orientation is held in the university, college then in the department as follow:

- ✚ University orientation day.
- ✚ New students are welcomed at Faculty and Department level in a social annual meeting.
- ✚ College QA Unit Orientation Week.

### 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)

- ✚ Student Academic Counseling Committee is in charge of student counseling.
- ✚ Each Faculty is assigned a group of students for counseling.
- ✚ Faculty will be available for student counseling at specific office hours on daily basis.
- ✚ Faculty should make a file for each student in his counseling group where student contact information, a copy of the student timetable and a copy of the student's academic record are kept and updated every semester.
- ✚ JU have different clubs to improve social and career of students as:  
 Science Club: <http://deanships.jazanu.edu.sa/sites/en/stu/Pages/ScienceClub.aspx>  
 Scout Club: <http://deanships.jazanu.edu.sa/sites/en/stu/Pages/ScoutClubJazanUniversity.aspx>  
 Computer Science Club: <http://deanships.jazanu.edu.sa/sites/en/stu/Pages/ComputerScienceClub.aspx>  
 Business Club : <http://deanships.jazanu.edu.sa/sites/en/stu/Pages/BusinessClub.aspx>  
 Society Partnership Club: <http://deanships.jazanu.edu.sa/sites/en/stu/Pages/SocietyPartnershipClub.aspx>

### 4. Special Support:

(Low achievers, disabled, , and talented students).

#### Low achievers:

- ✚ Teachers assign those students more assignments, help them during office hours and give them opportunities as and when needed.

#### Disable:

- ✚ The department, along with the college administrators, tries to create relevant conditions for the study of students and applicants with special needs without reducing the requirements for their study performance and in accordance with the principles of equal treatment.
- ✚ During an exam, an applicant with special needs shall be, at his request and based on the evaluation of his special needs, determined a form of the exam and method of taking it, taking regard of his special needs.



## 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	4	All Physics specialties		2	2	4
Associate Professor	6	All Physics specialties		3	3	6
Assistant Professor	8	All Physics specialties		4	4	8
Technicians and Laboratory Assistant	4			2	2	4
Administrative and Supportive Staff	2			1	1	2
Others (specify)	2	Secretary		1	1	2

## F. Learning Resources, Facilities, and Equipment:

### 1. Learning Resources:

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

The mechanism for providing and quality assurance of learning resources (textbooks, references and other resource materials, including electronic and web-based resources, etc.)

- A list of learning resources is kept in the Program QA Unit.
- The list of learning resources is annually updated by the teaching Faculty and gets approval from Program Board.
- The updated list of learning resources is then raised to the College of Science Deanship and hence to the Deanship for Library Affairs.
- Every year, the Head of physics department collects from faculty their need concerning the research databases and he sends them to the library Deanship.
- The faculty and students have free access to the digital library where they can find various materials including textbooks, references, thesis, and scientific journals.

### 2. Facilities and Equipment:

(Library, laboratories, classrooms, etc.)

Every year the physics department collects the equipment needed in all lab and sends the request to the Science College that in its turn send it to the JU equipment purchase administration.

#### **Library**

The College library contains books in sufficient numbers for all students in the college including physics students. Also, the central library in the university student may use beside the digital library of Saudi Arabia all students use their ID to enter its site

<https://www.jazanu.edu.sa/ar/e-services/access-sdl>

#### ✚ **Textbooks and Course Materials**

Wherever necessary, a scheduled course has a designated textbook, which has been adopted by the department. As all students registered in a course will have a copy of this book, an instructor may freely refer to the textbook as and when necessary. An instructor can propose a new textbook, either as a replacement for an existing one or as a new addition to a course, by following the University's procedure, which requires the approval of the department, the college, and the University.

#### ✚ **Teaching Laboratories**

The laboratories are well equipped with standard educational equipment. Multiple teaching laboratories serve students in all fields of Physics, including introductory courses and courses in Optics, Properties and Matter, Modern Physics, Atomic Physics, Solid State Physics and Nuclear Physics.

#### ✚ **Other Facilities**

Physics Department offers to their students male and female a well-equipped infrastructure (classrooms, laboratories, library facilities, IT and audio-visual teaching materials, safety, first aids and consumables. There are several study open places in all floors, computer rooms, Sports activities Room, Cafeteria, theater, and all other necessary premises.

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

(According to the nature of the program)

The college of science is committed to providing a safe and healthy campus environment. Among its highest priorities are the health and safety of all faculty, staff, and students, the visiting public, and members of the neighboring community to implement environmental and occupational health and safety programs and to ensure compliance with all relevant governmental laws and regulations. A variety of health care services to students, faculty, staff, and community members.

- ✚ The Campus Health Clinic is located inside the main/girls' campus.
  - ✚ Smoking is prohibited in any University facility and on any University grounds.
  - ✚ First aids boxes are in almost all rooms.
  - ✚ The purpose of the Chemical Safety Program is to ensure the proper handling of hazardous chemicals, as well as hazardous waste management and disposal. Exposure to hazardous chemicals is kept at a minimum by using the appropriate Personal Protective Equipment and by performing experiments in a certified chemical fume hood.
  - ✚ Fire prevention guidelines are listed in all places
  - ✚ Emergency Exit doors in all parts with sufficient Signboards in all places.
- Safety and safety instructions are announced at the laboratories and the places where students gather.

## G. Program Quality Assurance:

### 1. Program Quality Assurance System:

Provide a link to quality assurance manual.

<https://www.jazanu.edu.sa/ar/colleges/sci/physics-department/pg-student-manual>





## 2. Program Quality Monitoring Procedures:

**Planning**; the process of setting goals, developing strategies, outlining the implementation arrangements and allocating resources to achieve those goals. It is important to note that planning involves looking at several different processes:

- ✚ Identifying the vision, goals, or objectives to be achieved
- ✚ Formulating the strategies needed to achieve the vision and goals
- ✚ Determining and allocating the resources (financial and other) required to achieve the vision and goals
- ✚ Outlining implementation arrangements, which include the arrangements for monitoring and evaluating progress towards achieving the vision and goals

**Review processes** to support academic quality assurance should, ideally, be in place at different levels and cover specific issues:

- ✚ Quality is delivered through performance and improvement. This is the basic assumption of the system of quality assurance of teaching and learning.
- ✚ Performance is achieved by complying with the performance criteria derived from our mission and Policy.

Improvement is achieved by continuously working towards improving the quality of teaching and learning throughout the department, while the performance criteria function as the touchstone of good quality. Improvements are monitored during the planning and control cycle.

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

**Monitoring**: the ongoing process by which stakeholders obtain regular feedback on the progress being made towards achieving their goals and objectives. Reviewing progress against achieving goals. Monitoring also involves tracking strategies and actions being taken by partners and non-partners and figuring out what new strategies and actions need to be taken to ensure progress towards the most important results.

**Evaluation** is a rigorous and independent assessment of either completed or ongoing activities to determine the extent to which they are achieving stated objectives and contributing to decision making. Evaluations, like monitoring, can apply to many things, including an activity, project, program, strategy, policy, topic, theme, sector, or organization.

## 4. Procedures Used to Ensure the Consistency between within the main campus:

(including male and female sections).

In sections for male and female students the leaders of both sections participate in institutional governance and are fully involved in strategic planning, decision making, and senior administration with effective and continuing communication between sections. Strategic planning ensures equitable distribution of resources and facilities to meet the requirements of program delivery, research, and associated services in each section and quality evaluations consider performance at each section as well as for the institution.

- ✚ Male and female sections are represented in the membership of relevant committees and councils and participate fully in decision making through processes that are consistent with bylaws and regulations of the Higher Council of Education.
- ✚ Effective communication between members from each section on these committees and councils was





established, and individuals in the different sections carrying out related activities were fully involved in planning, evaluations and decision making.

- ✚ Planning processes and mechanisms for performance evaluation led to comparable standards in each section while taking into account of differing needs.
- ✚ Quality indicators, evaluations and reports show results for both sections indicating similarities and differences as well as overall performance.

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

- ✚ Courses and programs are evaluated and reported on annually and reports include information about the effectiveness of planned strategies and the extent to which intended learning outcomes are being achieved.
- ✚ When changes are made as a result of evaluations details of those changes and the reasons for them will be retained in the course and program portfolios.
- ✚ Quality indicators that include learning outcome measures were established for all courses and programs.
- ✚ Records of student completion rates are kept for all courses and for programs as a whole and included among quality indicators.
- ✚ Reports on programs are reviewed annually by the program coordinator and quality committees.
- ✚ JU Edugate System is established for central recording and analysis of course completion and program progression and completion rates and student course and program evaluations, with summaries and comparative data distributed automatically to departments, colleges, senior administrators, and relevant committees at least once each year.
- ✚ Appropriate actions are taken to solve evaluations problems (if any) to make improvements, either within the program or through institutional action as appropriate.
- ✚ In addition to annual evaluations a comprehensive reassessment of the program will be conducted at least once every five years. Policies and procedures for conducting these reassessments are published within the program.
- ✚ Program reviews should involve experienced people from relevant industries and professions, and experienced faculty from other institutions.
- ✚ In program reviews opinions about the quality of the program including the extent to which intended learning outcomes are achieved will be sought from students and graduates through surveys and interviews, discussions with faculty, and other stakeholders such as employers.

## 6. Program Evaluation Matrix:

Evaluation Areas/Aspects	Evaluation Sources/References	Evaluation Methods	Evaluation Time
Effectiveness of teaching & assessment	Students, Faculty	Direct assessment of CLOs, Surveys	End of semester
Leadership	Graduates, Alumni, Employers	Surveys	End of academic year
Partnership	Employer	Survey	End of academic year
Learning resources	Employers	Survey, visits, interviews	End of academic year





**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 (2) year(s).

No.	KPIs Code	KPIs	Targeted Level	Measurement Methods	Measurement Time
1	KPI-PG-1	Students' Evaluation of Quality of learning experience in the Program		Average of overall rating of final year students for the quality of learning experience in the program.	End of academic year
2	KPI-PG-2	Students' evaluation of the quality of the courses		Average students' overall rating of the quality of courses in an annual survey.	End of every semester
3	KPI-PG-3	Students' evaluation of the quality of academic supervision		Average students' overall rating of the quality of scientific supervision in an annual survey.	End of academic year
4	KPI-PG-4	Average time for students' graduation		Average time (in semesters) spent by students to graduate from the program.	End of academic year
5	KPI-PG-5	Rate of students dropping out of the program		Percentage of students who did not complete the program to the total number of students in the same cohort.	End of academic year
6	KPI-PG-6	Employers' evaluation of the program graduates' competency		Average of the overall rating of employers for the competency of the program graduates in an annual survey.	End of academic year
7	KPI-PG-7	Students' satisfaction with services provided		Average of students' satisfaction rate with the various services provided by the program (food, transportation, sports facilities, academic advising, ...) on a five-point scale in an annual survey.	End of academic year
8	KPI-PG-8	Ratio of students to faculty members		The ratio of the total number of students to the total number of full-time and full-time equivalent faculty members participating in the program.	End of academic year



No.	KPIs Code	KPIs	Targeted Level	Measurement Methods	Measurement Time
9	KPI-PG-9	Percentage of publications of faculty members		Percentage of faculty members participating in the program with at least one research publication during the year to total faculty members in the program	End of academic year
10	KPI-PG-10	Rate of published research per faculty member		The average number of refereed and/or published research per each faculty member participating in the program during the year. (Total number of refereed and/or published research to the total number of faculty members during the year)	End of academic year
11	KPI-PG-11	Citations rate in refereed journals per faculty members		The average number of citations in refereed journals from published research (total number of citations in refereed journals from published research for faculty members to the total published research).	End of academic year
12	KPI-PG-12	Percentage of students' publication		Percentage of students who: a. published their research in refereed journals. b. presented papers at conferences. to the total number of students in the program during the year	End of academic year
13	KPI-PG-13	Number of patents, innovative products, and awards of excellence		Number of: a. Patents and innovative products b. National and international excellence awards obtained annually by the students and staff of the program.	End of academic year

\*including KPIs required by NCAAA



## H. Specification Approval Data:

Council / Committee	
Reference No.	MEETING NO. 15
Date	5/10/2023

Head of the department

Dr. Hussain Alathlawi

