



Master of Science in Radiologic Sciences (Program Handbook)

Radiologic Sciences Department
Faculty of Applied Medical Sciences
King Abdulaziz University
2024-2025



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Historical Overview

Historical overview of the Faculty of Applied Medical Sciences

The Faculty of Applied Medical Sciences, founded in 1424 AH/2004 under the visionary guidance of the Custodian of the Two Holy Mosques, emerged as an independent faculty from the Faculty of Medicine and Medical Sciences at King Abdulaziz University in Jeddah. It is now one of its four health faculties, established to meet the societal demand for skilled healthcare professionals across various fields, ensuring alignment with advanced healthcare standards, and driving scientific and technological advancements in healthcare. The faculty's vision is to be a model in knowledge investment in the field of Applied Medical Sciences, while its mission is to promote community health by preparing pioneering graduates in sciences, research, and the profession in this field. To achieve this, the faculty aims to enrich the community with graduates who are qualified for the labor market and preferred in postgraduate programs, improve and develop academic programs compatible with the needs of the labor market, enhance the academic work environment with international and local quality standards for higher education, develop research capabilities, increase research productivity related to local and global community issues, integrate research and science with the health and private sectors, enhance workplace productivity, improve the administration, technical, financial, and support services environment, strengthen the relationship with the community, achieve the optimal investment of faculty resources, and develop external sources of financial income.

Overview of the Radiologic Sciences Department

Radiologic Sciences is a scientific department within the Faculty of Applied Medical Sciences. It was established in 2004 and has received academic accreditation from national and international bodies. The department focuses on teaching radiologic sciences and medical imaging for diagnosing and assisting in the treatment of diseases. The department offers two programs: an undergraduate bachelor's program and a graduate master's program.

Radiologic Sciences Master's Program

Program Overview

The Master of Science in Radiologic Sciences program is approved by the Saudi Commission for Health Specialties (SCFHS), which ensures that graduates are academically and professionally equipped with the essential skills and competencies that are highly valued in the healthcare sector (1). The program offers two specialized tracks: Magnetic Resonance Imaging (MRI) and Ultrasound Imaging (US), each designed with distinct features and applications to address evolving healthcare needs (Table 1).

The program's vision is “to be the premier graduate program in radiologic sciences and medical imaging,” while its mission is “to empower graduates to excel in clinical practice, research, and leadership in radiologic sciences and medical imaging.”

To fulfill this mission, the program is committed to achieving the following goals:

- Graduating highly skilled clinical specialists in radiologic sciences and medical imaging
- Promoting research and continuous learning in the field of radiologic sciences.
- Enhancing professionalism and leadership skills in radiologic sciences.

Table 1: Master of Science in Radiologic Sciences at KAU

Program title	Master of Science in Radiologic Sciences
Program tracks	1- Magnetic Resonance Imaging (MRI) 2- Ultrasound Imaging (US)
Program code*	091407
Qualification	Master's degree with a thesis or project
Qualification type	Academic
Department	Radiologic Sciences
College	Faculty of Applied Medical Sciences (FAMS)
Institution	King Abdulaziz University (KAU)
Campus	Main campus
Location	Faculty of Applied Medical Sciences, King Abdulaziz University, Jeddah 21589, Saudi Arabia
System of study	Coursework and thesis
Mode of study	On campus
Credit hours for each track	42
Minimum actual contact hour	360
Program duration	2 academic years/4 semesters
Enrollment conditions according to NQF	Bachelor in radiologic sciences or medicine and surgery

*According to the Saudi Standard Classification of Educational Levels and Specializations, NQF: National qualification framework.

Graduates of this program are qualified for professions such as researchers, university lecturers, senior radiologic technologists, and application specialists for medical imaging

devices. They can find employment in research institutes, academic institutions, hospitals and healthcare centers, as well as medical imaging equipment companies.

Program Learning Outcomes

In alignment with the program goals, the program has defined a set of Program Learning Outcomes (PLOs) for both tracks. These outcomes represent the competencies graduates are expected to achieve upon completion of the program. The PLOs align with the requirements of a master's degree (Level 7) as defined by the National Qualifications Framework (NQF) (2) and are tailored to meet labor market demands. This alignment is essential to ensure that graduates acquire the knowledge, skills, and values necessary for success in their professional careers. These outcomes are categorized into three main domains:

Knowledge and Understanding

- **K1:** Explain in details physics principles of current and advance technologies in radiologic sciences.
- **K2:** Describe anatomical appearance and characteristics of pathologies in medical imaging.
- **K3:** Comprehend scientific literature of leadership and management in health care.

Skills

- **S1:** Critically appraisal of clinical scientific literature for optimum imaging and therapeutic.
- **S2:** Integrate graduate-level theoretical and practical skills into professional clinical practice.
- **S3:** Provide appropriate image interpretation of normal and abnormal clinical conditions.
- **S4:** Develop critical thinking to conduct research in radiology and medical imaging.

Values, Autonomy, and Responsibility

- **V1:** Express professional ideas in management and education to improve professional practice.
- **V2:** Commitment to keep up-to-date knowledge in the field of radiologic sciences.
- **V3:** Provide patient care, privacy and confidentiality.

Program Courses

Magnetic Resonance Imaging (MRI)

Level	Course Code	Course Title	Required or Elective	Credit Hours
Level 1	RAD601	Cross-Sectional Anatomy	Required	2
	RAD620	Magnetic Resonance Imaging I	Required	2
Level 2	RAD621	Magnetic Resonance Imaging II	Required	2
	RAD622	Magnetic Resonance Imaging Procedures	Required	2
	RAD694	Scientific Research Methodology & Biostatistics in Radiology	Required	2
Level 3	RAD602	Leadership & Management in Healthcare	Required	2
	RAD623	Advanced Magnetic Resonance Imaging	Required	3
	RAD624	MRI Interpretation and Reporting	Required	3
	RAD626	MRI Clinical Practice I	Required	3
Level 4	RAD625	MRI Processing and Analysis	Required	2
	RAD627	MRI Clinical Practice II	Required	3
	RAD699	Thesis	Required	10
Any level (1 and 2)	RAD603	Radiobiology and Safety	Elective	2
	RAD604	Radiologic Pathology	Elective	2
	RAD605	Human Anatomy & Physiology	Elective	2
	RAD606	Health Informatics	Elective	2
	MEED820	Medical Simulation in Medical Imaging	Elective	2
Total credits (required and elective courses)				42

Required MR Courses

Course Title: Cross Sectional Anatomy

Course Code: RAD 601

Course General Description: This course is required to both MRI and US master students providing them with a comprehensive knowledge of detailed normal anatomical structures parallel with the pathological abnormal anatomy of all body parts/organs using imaging modalities like MRI and US.

Pre-requirements for this Course: None

Course Title: Magnetic Resonance Imaging I

Course Code: RAD 620

Course General Description: This course introduces the students to the fundamental concept of magnetic resonance imaging (MRI). Topics include basic MRI physics principles, magnetism, signal production, tissue MRI safety. characteristics, spatial localization, pulse sequencing, imaging parameters, instrumentation and MRI safety.

Pre-requirements for this Course: None

Course Title: Magnetic Resonance Imaging II

Course Code: RAD 621

Course General Description: This course is designed to extend the student's knowledge of various sequences used in clinical MRI. Students will learn to discern diverse tissue contrasts on MRI weighted images and evaluate and address various image artifacts by comprehending their sources, and employing effective solutions. The course further covers the quality assurance procedures in MRI, ensuring students gain practical insights into maintaining high standards in imaging practices. Additionally, the course addresses artificial intelligence (AI) and MRI safety procedures and potential risks, providing a well-rounded perspective on the field.

Pre-requirements for this Course: RAD 620

Course Title: MRI Procedures

Course Code: RAD 622

Course General Description: The course provides the theoretical foundations and practical applications of clinical MR Imaging across various body parts. Further the course will Equip students with advanced knowledge in assessing scanning parameters and protocols, emphasizing the assessment of scanning parameters, identification of anatomical structures, interpretation of common pathologies, and proficiency in patient care pre and post-examination.

Pre-requirements for this Course: RAD 620

Course Title: Scientific Research Methodology and Biostatistics in Radiology

Course Code: RAD 694

Course General Description: In this course students will develop their knowledge of epidemiology, basic research designs and research ethics then employ these skills to critically evaluate published research. Students will also gain a basic understanding of descriptive and commonly used inferential statistics. They will apply these skills in the preparation of a submission of a research proposal to an ethics committee.

Pre-requirements for this Course: None

Course Title: Leadership and Management in Healthcare

Course Code: RAD 602

Course General Description: In this course, Students will delve into hospital management issues, with a specific emphasis on challenges unique to medical imaging services. The course addresses supporting management concepts, dissecting financial issues in hospitals, and evaluating performance within medical imaging teams. Special attention is given to emergency management, emphasizing leadership principles for effective decision-making. Students will also engage in self-assessment, exploring the concepts of servant leadership and employee engagement, while developing practical skills in risk management for proactive problem-solving within the dynamic field of medical imaging.

Pre-requirements for this Course: None

Course Title: Advanced MRI

Course Code: RAD 623

Course General Description: In this course, you will explore advanced techniques used in MRI imaging, gain insights into the applications of advanced MRI protocols and procedures, and discover their clinical relevance.

Pre-requirements for this Course: RAD 621

Co-requirements for this Course: RAD 624

Course Title: MRI Interpretation and Reporting

Course Code: RAD 624

Course General Description: The course is designed to equip students with advanced skills in deciphering complex MRI images. Students will delve into the intricacies of anatomical interpretation, examining both pre and post-contrast images of various body parts. The course focuses on honing the ability to distinguish pathological conditions from normal MRI images, requiring a nuanced understanding of medical terminology associated with diseases. Furthermore, students will learn to analyze how pathological conditions impact the selection of imaging protocols, developing a comprehensive skill set for evaluating MRI images. The course culminates with the practical application of knowledge, as students become adept at translating their interpretations into articulate and precise MRI reports.

Pre-requirements for this Course: RAD 622

Course Title: MRI Clinical Practice I

Course Code: RAD 626

Course General Description: This course is designed to provide the students to engage in real-world clinical situations within a magnetic resonance imaging department and the opportunity to integrate theoretical knowledge and concepts with clinical practice. Under indirect supervision of a qualified practitioner, students will be able to observe and perform various MRI imaging techniques, gain hands-on knowledge of MRI protocols and procedures of head, neck, spine, upper musculoskeletal, and lower musculoskeletal.

Pre-requirements for this Course: RAD 620

Co-requirements for this Course: RAD 622

Course Title: MRI Processing and Analysis

Course Code: RAD 625

Course General Description: It is a comprehensive course designed to provide a foundational understanding of the process and analysis of MR images. At the outset, the course introduces students to MR image formation, enhancement, visualization, and basic analysis methods crucial in medical research and diagnostics. Aspiring researchers are encouraged to explore further by visiting relevant software websites for advanced courses, ensuring they are well-prepared for the dynamic field of medical imaging. Finally, it provides many examples of its applications to illustrate concepts and emphasize practical knowledge.

Pre-requirements for this Course: RAD 623

Course Title: MRI Clinical Practice II

Course Code: RAD 627

Course General Description: This course is designed to provide the students to engage in real-world clinical situations within a magnetic resonance imaging department and the opportunity to integrate theoretical knowledge and concepts with clinical practice. Under indirect supervision of a qualified practitioner, students will be able to observe and perform various MRI imaging techniques, gain hands-on knowledge of MRI protocols and procedures of abdomen, pelvis, breast, cardiac, and angiography.

Pre-requirements for this Course: RAD 626

Course Title: Thesis

Course Code: RAD 699

Course General Description: This course is required for the Master degree in Radiologic Sciences. Under the guidance of a supervisor, this whole semester consists of writing and a public defense of a Master Thesis in Radiologic Sciences. Students shall formulate a research question of relevance within the field of study, choose a methodology that can be used to find

answers to the research question, use concepts, theories and methods to analyze and answer the research question and present a written, scientifically convincing argumentation to justify the results. Each student is given a supervisor who will advise the student in the research task included in the course and in the writing of the thesis.

Pre-requirements for this Course: RAD 694

Ultrasound Imaging (US)

Level	Course Code	Course Title	Required or Elective	Credit Hours
Level 1	RAD601	Cross-Sectional Anatomy	Required	2
	RAD640	Ultrasound Physics & Instruments	Required	2
Level 2	RAD641	Abdomen Sonography & Small Parts	Required	2
	RAD642	Obstetric Sonography	Required	2
	RAD643	Gynecology Sonography	Required	2
	RAD694	Scientific Research Methodology & Biostatistics in Radiology	Required	2
Level 3	RAD602	Leadership & Management in Healthcare	Required	2
	RAD644	Clinical Ultrasonography I	Required	2
	RAD645	MSK & Pediatric Sonography	Required	2
	RAD646	Vascular ultrasound & Echocardiography	Required	3
Level 4	RAD647	Clinical Ultrasonography II	Required	2
	RAD648	Ultrasound Image Interpretation	Required	3
	RAD699	Thesis	Required	10
Any level (1 and 2)	RAD603	Radiobiology and Safety	Elective	2
	RAD604	Radiologic Pathology	Elective	2
	RAD605	Human Anatomy & Physiology	Elective	2
	RAD606	Health Informatics	Elective	2
	MEED820	Medical Simulation in Medical Imaging	Elective	2
Total credits (required and elective courses)				42

Required US Courses

Course Title: Cross Sectional Anatomy

Course Code: RAD 601

Course General Description: This course is required to both MRI and US master students providing them with a comprehensive knowledge of detailed normal anatomical structures parallel with the pathological abnormal anatomy of all body parts/organs using imaging modalities like MRI and US.

Pre-requirements for this Course: None

Course Title: Ultrasound Physics and Equipment

Course Code: RAD 640

Course General Description: This course is designed to cover the principles of diagnostic medical ultrasound physics, sound wave characteristics, interaction of ultrasound with human tissue, artifacts, principle of Doppler ultrasound, safety and quality control.

Pre-requirements for this Course: None

Course Title: Abdomen Sonography and Small Parts

Course Code: RAD 641

Course General Description: The course is designed to provide students with the required theoretical tools in practicing abdominal US in clinic. Also, enhance students critical thinking abilities through revising up to date US research articles in abdomen.

Pre-requirements for this Course: RAD 640

Course Title: Obstetric Sonography

Course Code: RAD 642

Course General Description: Obstetric sonography courses typically cover a range of topics including: transabdominal, transvaginal, transperineal scanning techniques for the 3 trimesters of pregnancy, evaluation of ectopic pregnancy and assisted fertilization techniques. Ultrasound of multiple pregnancies, sonographic assessment of gestational age and growth.

Pre-requirements for this Course: RAD 640

Course Title: Gynecological Sonography

Course Code: RAD 643

Course General Description: Sonographic scanning methods, standard protocols and interpretational skills for recognition of sonographic appearances of normal anatomy, anatomical variants and disease processes associated with the female pelvis. Appreciation of when to modify standard approaches to the clinical question and patient presentation and recognize limitations of ultrasound in relation to other medical imaging and laparoscopic examinations of the reproductive system.

Pre-requirements for this Course: RAD 640

Course Title: Scientific Research Methodology and Biostatistics in Radiology

Course Code: RAD 694

Course General Description: In this course students will develop their knowledge of epidemiology, basic research designs and research ethics then employ these skills to critically evaluate published research. Students will also gain a basic understanding of descriptive and commonly used inferential statistics. They will apply these skills in the preparation of a submission of a research proposal to an ethics committee.

Pre-requirements for this Course: None

Course Title: Leadership and Management in Healthcare

Course Code: RAD 602

Course General Description: In this course, Students will delve into hospital management issues, with a specific emphasis on challenges unique to medical imaging services. The course addresses supporting management concepts, dissecting financial issues in hospitals, and evaluating performance within medical imaging teams. Special attention is given to emergency management, emphasizing leadership principles for effective decision-making. Students will also engage in self-assessment, exploring the concepts of servant leadership and

employee engagement, while developing practical skills in risk management for proactive problem-solving within the dynamic field of medical imaging.

Pre-requirements for this Course: None

Course Title: Clinical Ultrasonography I

Course Code: RAD 644

Course General Description: This course is designed to assign students to a clinical education center to practice ultrasound imaging of abdomen & pelvis, small parts and obstetrics & gynecology, under the supervision of a qualified practitioner.

Pre-requirements for this Course: RAD 641, RAD 642, RAD 643

Course Title: Musculoskeletal and Pediatric Sonography

Course Code: RAD 645

Course General Description: This course is designed to provide the essential to gaining a solid grasp of the concepts and information to the clinical applications of musculoskeletal and pediatric ultrasound.

Pre-requirements for this Course: RAD 640

Course Title: Vascular Ultrasound and Echocardiography

Course Code: RAD 646

Course General Description: This course is designed to provide the essential to gaining a solid grasp of the concepts and information to the clinical application of cardiovascular ultrasound, including vascular ultrasound and echocardiography.

Pre-requirements for this Course: RAD 640

Course Title: Clinical Ultrasonography II

Course Code: RAD 647

Course General Description: This course is designed to assign students to a clinical education center to practice ultrasound imaging of cardiovascular system (CVS), musculoskeletal system (MSK), and pediatrics under the supervision of qualified practitioners.

Pre-requirements for this Course: RAD 644, RAD 645

Course Title: Ultrasound Image Interpretation

Course Code: RAD 648

Course General Description: This course will provide theoretical underpinning knowledge in formulating clinical ultrasound reports of different body organs. It will also enhance and develop the students' image interpretation skills.

Pre-requirements for this Course: RAD 641, RAD 647

Course Title: Thesis

Course Code: RAD 699

Course General Description: This course is required for the Master degree in Radiologic Sciences. Under the guidance of a supervisor, this whole semester consists of writing and a public defense of a Master Thesis in Radiologic Sciences. Students shall formulate a research question of relevance within the field of study, choose a methodology that can be used to find answers to the research question, use concepts, theories and methods to analyze and answer the research question and present a written, scientifically convincing argumentation to justify the results. Each student is given a supervisor who will advise the student in the research task included in the course and in the writing of the thesis.

Pre-requirements for this Course: RAD 694

MRI and US Elective Courses

Course Title: Radiobiology and Safety

Course Code: RAD 603

Course General Description: This course covers the effects of ionizing radiation on physical and biological systems in the context of medical imaging and radiation therapy. Associated radiation safety precautions are also covered. The course will explore the biological impact of

ionizing radiation on living tissue at the molecular, cellular, organ, and organism level. Hence, this course will provide you with the fundamental foundation for understanding the biological impact of radiation in radiotherapy and diagnostic x-ray imaging. It will also provide you with a means to assess the risk versus benefit of radiation use in medical procedures.

Pre-requirements for this Course: None

Course Title: Radiologic Pathology

Course Code: RAD 604

Course General Description: This course will introduce the medical terms that describe different pathological conditions, causes and classification of diseases. Furthermore, it will explore the relationship between radiology and pathology, emphasizing the interpretation of medical imaging studies for the diagnosis and management of various diseases. Finally, students will gain a comprehensive understanding of the principles, techniques, and applications of radiologic imaging in the context of pathological conditions affecting different organ systems.

Pre-requirements for this Course: None

Course Title: Human Anatomy and Physiology

Course Code: RAD 605

Course General Description: The course offers a focused exploration of the human body's structure and function, with a specific emphasis on systems relevant to medical imaging. Covering skeletal, muscular, cardiovascular, respiratory, and nervous systems, the course integrates physiological principles to establish a foundational understanding.

Pre-requirements for this Course: None

Course Title: Health Informatics in Medical Imaging

Course Code: RAD 606

Course General Description: This course will present foundations and applications of Picture Archival and Communication Systems (PACS). Network fundamentals, information systems

and imaging standards, user training, workflow, vendor selection, and imaging disaster recovery will be examined.

Pre-requirements for this Course: None

Course Title: Medical Simulation in Medical Imaging

Course Code: MEED 820

Course General Description: In this course students delve into the fundamental principles of medical simulation, with a specific emphasis on simulation-based assessment and diverse simulation modalities. This comprehensive program is designed to equip students with the essential knowledge, skills, and attitudes necessary for navigating authentic medical scenarios. Through hands-on simulated experiences, participants gain a practical understanding of how various situations might unfold in real-world medical imaging settings. This course serves as a dynamic bridge between theoretical knowledge and practical application, fostering a holistic preparation for the challenges and complexities encountered in the field of medical imaging.

Pre-requirements for this Course: None

Program Structure

The program commenced in the 2021–2022 academic year following a two-semester system. In 2022–2023, the structure shifted to a three-semester system, allowing courses to be delivered to both first- and second-year students. However, in 2023–2024, the program returned to a two-semester format, with no new student admitted that year. Consequently, only second-year students continued their studies, and there was no incoming first-year cohort. In the 2024–2025 academic year, new students have been admitted, resulting in a single active cohort. As of the 2024–2025 academic year, 17 students have graduated. All of them have either presented their research projects at international conferences or published their work in peer-reviewed journals, demonstrating a high level of competence and adherence to academic standards.

The diagram below illustrates the program structure, student enrollment trends, and course distribution over the academic years.

Year	Level	Master of Radiologic Sciences Program Courses			Enrolled students	Graduated students
		1 ST Semester	2 ND Semester	3 RD Semester		
 2021–2022	1 st	RAD694/RAD601/RAD602/RAD620 /RAD640	RAD603/RAD604/RAD621/RAD622/ RAD626/RAD642/RAD643/RAD641		18	NA
	2 nd		NA			
2022–2023	1 st	RAD694/RAD601/RAD605/RAD620 /RAD640	RAD604/RAD603/RAD621/RAD643/ RAD642	RAD602/RAD641/RAD646/ RAD622/RAD626	8	4
	2 nd	RAD623/RAD624/RAD627/RAD646 /RAD645/RAD644	RAD625/RAD647	RAD648		
 2023–2024	1 st		NA		NA	10
	2 nd	RAD623/RAD624/RAD627/RAD645 /RAD644	RAD625/RAD648/RAD647			
2024–2025	1 st	RAD601/RAD603/RAD605/RAD620 /RAD640	RAD604/RAD694/RAD621/RAD622 /RAD641/RAD642/RAD643		10	1
	2 nd		In progress			

 Program Launch
  Changes in program structure

Figure 1: Overview of the Master of Science in Radiologic Sciences Program Structure

Teaching and Assessment Methods

The program integrates a variety of effective teaching approaches to enhance student learning across all courses within the program. The following strategies are employed to ensure rich and engaging educational experience. The aim is to consistently implement these approaches, thereby fostering a comprehensive and well-rounded understanding of the subject matter.

First: Active Learning Strategies

1. Expressing ideas through writing.
2. Activating interactive lectures.
3. Classroom discussion.
4. Preparing a thinking-based activity.
5. Problem-based learning.
6. Assigning students to prepare case study summaries.
7. Reading / Self-study.
8. Preparing a group project.
9. Online discussion.
10. Final assessment strategy.
11. Innovation and creativity in learning through teaching or assignments.

Second: Large Group Teaching Strategies

12. Working in pairs or small groups.
13. Asking questions, including short answer tests and polls.
14. Using the clinical problem-solving method.
15. Lecture notes: To guide the student on how to take notes, prepare discussions, ask questions, extend or enhance the content of the learning session.
16. Simulation and role-playing.
17. Visual resources such as displaying still images of video clips from a number of scenarios.
18. Presentations.

Third: Small Group Learning Strategies

19. Tutorials.
20. Seminars.
21. Snowball technique for learning.
22. Free discussion group.
23. Problem-based learning.
24. Brainstorming.
25. Role-playing.
26. Gamification and simulations.
27. Clinical teaching.

Fourth: Flipped Classroom and Team-Based Learning

28. Flipped Classroom.
29. Team-Based Learning.

Fifth: E-Learning Strategies

30. Lectures in E-learning.
31. Flipped Classroom.
32. Discussion.
33. Self-learning.
34. Mentoring.
35. Small group teamwork:
 - Discussion groups, Guided design, Role-playing, and Gamification.
36. Collaborative learning.
37. Case study.
38. Forum.
39. Learning contracts.

There are more teaching and learning strategies available in the Teaching and Learning Strategies Handbook prepared by the University Vice-Presidency for Academic Affairs ([3](#)).

Admission Process Overview

This section outlines essential information on eligibility requirements, application steps, selection criteria, deferment conditions, transfer policies, and graduation requirements.

Application Requirements

All applications for admission to King Abdulaziz University must be submitted electronically through the university's official portal, *Qobol*.

Applicants must meet the eligibility criteria specified by the Deanship of Graduate Studies, which are published on its official website ([4](#)).

Key requirements for admission to the Master of Science in Radiologic Sciences program include:

- **Academic Performance:** A minimum grade of "Above Average" in the bachelor's degree.
- **English Language Proficiency:** A minimum IELTS score of 5.
- **Graduate Aptitude Test (GAT):** A minimum score of 65 is required.
- **Eligible Specializations:** Applied Medical Sciences (Diagnostic Radiology), Medicine, and Surgery.
- **Program Type:** Master's degree by coursework and thesis.

Selection Criteria

Admission is based on a weighted evaluation system designed to ensure fairness and academic merit:

- **60%** – Undergraduate GPA.
- **40%** – Department-administered written exam.

This process applies equally to all applicants, regardless of gender, in alignment with the university's commitment to diversity, inclusion, and gender equality.

Deferment Policy for Graduate Students

Newly admitted students are not eligible for deferment. Deferment requests are only considered for students who have completed at least one academic semester, and must meet the following conditions:

- **Submission Deadline:** Requests must align with the academic calendar.
- **Maximum Duration:** Deferment cannot exceed four academic semesters in total, with a maximum of two consecutive semesters per request. Each request must be submitted separately.
- **Degree Timeline:** Approved deferment periods do not count toward the maximum time allowed to complete the degree.
- **Justification:** A valid and compelling reason is required.
- **Restrictions:** Deferment is not allowed during grace (additional) semesters.
- **Submission Method:** Requests must be submitted electronically through the Graduate Studies transaction system via the student's account.
- **Approval Process:** Submission does not guarantee approval. Students are responsible for monitoring their request status until official approval is granted.

Transfer Between Tracks Within the Same Department

Students may request a transfer to a different track within the same department under the following conditions:

- Completion of at least six credit hours of coursework.
- A minimum GPA of 3.75 (Very Good).
- Fulfilment of the admission requirements for the intended program.
- Transfers are allowed only once, whether within or outside the college.
- Applications must comply with the academic calendar.
- The target department may grant course equivalency for relevant prior coursework.
- The target department may also require the completion of prerequisite courses before the student begins the new curriculum.
- Applications must be submitted electronically through the student's account on the Graduate Studies transaction system.

For more information about transferring guidelines, please refer to the Deanship of Graduate Studies webpage at KAU ([4](#)).

Student Transfer and Graduation Procedures

Transfer Process

Transfers to another graduate program within KAU are governed by the university's regulations. For internal transfers, the following steps apply:

1. **Application Submission:** Submit a formal application through the Deanship of Graduate Studies, including all required documents (e.g., academic transcripts).
2. **Initial Review:** Once eligibility is confirmed, the application is forwarded to the relevant department's graduate studies committee.
3. **Department Evaluation:** The committee may request additional documents or conduct interviews.
4. **Notification:** Students are informed of the final decision after the review process.

Graduation Requirements

To graduate from a master's program at KAU, students must meet the following requirements:

- Completion of all program coursework.
- Achievement of a cumulative GPA of at least 3.75 out of 5 (Very Good).
- Successful defense and formal approval of the master's thesis.

The standard duration for completing a master's degree is four semesters, with extensions allowed up to eight semesters under exceptional circumstances. For more information, please refer to the Deanship of Graduate Studies webpage at KAU ([5](#))

Once all requirements are fulfilled, KAU will officially confer the degree in recognition of the student's academic achievement.

Student Support Services

There is a range of support services available to help postgraduate students enhance their academic performance, advance their professional development, and maintain personal well-being. These services are designed to foster a supportive and inclusive learning environment that meets the diverse needs of postgraduate students.

Academic Advising

Academic advising is a cornerstone of student success in higher education. At the Radiologic Sciences Department, academic advisors are regarded as a vital resource, playing a key role in fostering students' diverse talents and supporting their comprehensive development—academically, psychologically, and socially. Academic advising has a unique and vital role that works to improve the overall quality of university life. Academic advising is a right and a duty for all students.

Academic advising is provided by a designated faculty member, referred to as the *“Academic Advisor”*. The advisor plays an essential role in supporting students throughout their studies by offering guidance, information, and referrals related to academic matters. The Academic Advisor assists students in the following areas:

- Providing advice on course selection and registration in alignment with the program curriculum.
- Explaining academic policies, university regulations, and degree requirements.
- Monitoring academic performance and recommending strategies for improvement when needed.
- Assisting students in overcoming any academic or personal challenges by providing guidance and referring them to appropriate support services when needed
- Acting as the main point of contact for academic concerns, appeals, or study-related inquiries.
- For students enrolled in a thesis-based track, the academic advisor supports the student in selecting a thesis topic aligned with the objectives of the university, the

department, and the student's interests. The advisor also assists in preparing the research proposal.

- Once a thesis supervisor is officially assigned, the supervisor assumes the role of academic advisor.

The advisee/student has the responsibility to:

- To obtain a complete copy of the Academic Advising Handbook, read it thoroughly, and understand all rights and responsibilities.
- To take full responsibility for their academic performance, recognizing that academic advising is a support tool meant to be actively utilized.
- To be aware of their assigned academic advisor and their office hours. Once a thesis supervisor is appointed, they will assume the role of academic advisor.
- To meet with the academic advisor at least once per semester to discuss academic and career goals, the study plan, course schedule, and any unclear matters.
- To follow the advisor's recommendations and attend meetings regularly as scheduled.
- Students are encouraged to consult with their Academic Advisor regularly, especially at the beginning of each semester or when facing academic difficulties.
- Students can find the name of their assigned academic advisor by logging into their ODUS Plus account. They may communicate with their advisor via email, Blackboard or by visiting during official office hours.

For more information about academic advising services, please refer to the Deanship of Admission and Registration webpage at KAU ([6](#)).

Career Development Support

Career Guidance and Employment Support Center plays a vital role in developing the abilities and skills of students by helping them define their career goals and make informed decisions that align with current labor market demands. The center also supports job-seeking students by providing up-to-date information on employment opportunities across various sectors. Through workshops, one-on-one guidance, and professional development resources, the center empowers students to enter the workforce with confidence and a clear vision for their

professional path. For more information about Career Guidance and Employment Support Center, please visit the center webpage at KAU ([7](#)).

The MSc program in Radiological Sciences offers career development support aimed at equipping students with the skills and opportunities necessary for success in academic, clinical, and research roles within the field of radiological sciences. The program fosters professional growth by promoting innovation, encouraging creativity, and providing a structured environment for continuous development.

The department supports students through a range of targeted services, including workshops, seminars, and training sessions focused on essential competencies such as, but not limited to, research methodology, academic writing, résumé and interview preparation, and innovation in imaging sciences. These activities are designed to expand students' perspectives, strengthen their professional capabilities, and nurture a culture of lifelong learning. The department announces such activities through announcement board in the Faculty of Applied Medical Science and social media platforms, such as the [Department X account](#).

In addition, the program encourages student engagement in collaborative research and interdisciplinary initiatives, both of which enhance employability and provide valuable experience for future leadership roles in clinical practice, academia, or the healthcare industry.

Counseling and Wellbeing Resources

King Abdulaziz University offers a wide range of counseling and wellbeing services to support students throughout their academic journey. At the heart of this support is the University Counseling Center, managed by the Deanship of Student Affairs, which provides services to all university students and staff members.

The center addresses a broad spectrum of student needs, including academic, personal, social, financial, and psychological concerns. Its mission is to assist students in navigating challenges, enhancing their overall university experience in a confidential and supportive environment. The MSc program in Radiological Sciences offers mental health support through collaboration between the faculty's Guidance and Personal Counseling Committee and the University

Counseling Center. For more information about the University Counseling Center, please visit the Deanship of Students' Affairs webpage at KAU ([8](#)).

The Deanship of Student Affairs provides comprehensive support for students with special needs through the Disability Services Centre, a dedicated office that offers guidance and personalized assistance. The university ensures physical accessibility across campus, including buildings, classrooms, parking areas, and facilities, to support students with mobility challenges. In addition, the center provides access to assistive technology, such as screen readers, voice recognition software, and Braille printers, to enhance learning. Students also benefit from psychological counseling services designed to help them manage the emotional and academic challenges associated with their disabilities. Furthermore, tailored healthcare services, including medical care and therapy, are available to meet their specific needs, ensuring a supportive and inclusive learning environment. For more information about the Disability Services Centre, please visit the Deanship of Students' Affairs webpage at KAU ([9](#)).

Rules and Regulations

Attendance requirements

1. Students must regularly attend all lectures, seminars, tests, labs, and exams according to the course schedule for each course and be present in classrooms at the scheduled start time.
2. Course coordinators monitor attendance according to the course schedule and submit it to the department secretariat each week.
3. When a student is 15 minutes late to a lecture, they will be recorded as "late." Three times they are late; it will be counted as one absence.
4. When the percentage of unexcused absences reaches 10% of the teaching hours allocated for each course in the semester, the student will receive the first written warning. The warning will be sent to the student by the course coordinator, and a copy of the warning will be sent to the student's academic advisor.
5. When the percentage of unexcused absences reaches 20% of the teaching hours allocated for each course in the semester, the student will receive a second warning through the college's Educational Affairs Department
6. If the percentage of absences exceeds 25%, the course coordinator will report the student to the department head to prevent him from attending the final exam for the course. A grade of (DN) will be given to him in the course. The student may submit an appeal, accompanied by excuses (if any), to cancel this prevention and allow him to attend the final exam.
7. Justifications for absence are reviewed on a case-by-case basis. They are submitted for the course coordinator's approval, and then the justifications are submitted.

Justifications for Absence

- Acceptable medical conditions, which are certified by bringing the original medical report from the Medical Department, the University Hospital, or an accredited hospital.
- Deaths in the family.
- Attendance to participate in activities after obtaining the approval of the course coordinator and the department administration.

- Absence with permission from the university.
- Other excuses are reviewed by an ad hoc committee headed by the department head

Examination regulations

1. Students must arrive at least 15 minutes prior to the start of the exam; they will not be admitted into the exam room 30 minutes after its starting time; they must be referred to the course coordinator if they have any reason.
2. No extra time will be allowed for a student who arrives late for an exam.
3. Students are not allowed to leave the class during the first 30 minutes of the exam.
4. All personal belongings must be placed in the designated area; only essential materials that are required can be brought into the exam.
5. Students must enter the room quietly, sit down 10 minutes before the exam starts, and get organized; invigilators are not responsible for the assembly of students.
6. All students must have everything they need, including pens (including a spare), a pencil, an eraser, and a calculator.
7. Mobile phones must be switched off during the exam
8. Exams will be conducted during the allocated time shown in the timetable; hence, students are only allowed the allocated time for each exam; they must pace themselves accordingly.
9. Students are not allowed to communicate or talk to other students in any way.
10. A student who is suspected of cheating in the exam is not allowed to complete the exam and is liable to disciplinary action.
11. Students must raise their hand if they wish to communicate with the invigilators.
12. Students are not allowed to ask any questions related to the exam to the invigilators.
13. Students must demonstrate good manners in the exam and show respect for the invigilators.
14. If, for any reason, a student is given permission to leave the class temporarily, the student must be accompanied by an invigilator, and no extra time will be given for a toilet break.
15. The student will be informed of the time 20 minutes and 5 minutes before the end of the exam

16. At the end of the exam, all students must stop writing and remain seated while invigilators collect exam papers.

Not following any of the rules above will subject the student to the inspection and an appraisal committee to discuss possible consequences.

Code of Conduct

1. Commitment to the approved uniform for the Radiologic Sciences Department: black for female students / gray for male students inside the university, and commitment to a modest Islamic appearance appropriate for study.
2. Wearing an identification card during work hours and displaying it clearly.
3. To adhere to attendance regulations.
4. To adhere to exams policies.
5. To adhere to the research plan agreed upon and approved by the Academic Department and College Councils and the Deanship of Graduate Studies.
6. To be serious and attentive to everything required of him academically without delay or negligence.
7. To adhere to the instructions and directions provided directly by the supervisor.
8. The student must prepare his research tools well and develop his skills in them. He is fully responsible for the intention of conducting and carrying out research activities and the various tasks necessary to complete his thesis.
9. To discuss ways to solve problems or difficulties facing the research directly with the primary supervisor when they occur.
10. The student is responsible for informing the academic department of the research plan's timeline, the stages that have been completed, and for following up on the procedure for changing the supervisor or the thesis topic in a regular manner (in the event of an emergency involving the primary supervisor, such as retirement, illness, termination of contract, death, etc.).
11. To adhere to the accepted ethics of scientific research, as well as academic norms, such as documenting information and giving credit to its owners

12. The academic thesis must include the necessary thanks to the individuals who provided him with academic assistance, or the entities that cooperated with him directly or indirectly, or that provided him with financial support.
13. The student must make all amendments requested by the examination committee within the specified time, and adhere to and commit to the approval of the committee rapporteur, and this must be done under the supervision of the main supervisor



Figure 2: Dress Code for Male and Female Students in the Department of Radiologic Sciences.

Procedures for lodging complaints and appeals

- Students can communicate concerns through email, designated complaint forms, and direct meetings with program administrators.
- The general process for addressing concerns involves submitting a formal written complaint outlining the nature of the concern, detailing the alleged incidents, and providing any supporting evidence.

Program Faculty Members

Name	Academic Title	General Specialty	Subspecialty	Email
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Facilities and Resources

The program provides updated learning resources and services aligned with student numbers and feedback.

- Classrooms and laboratories are equipped with projectors, whiteboards, internet access, and maintain proper lighting and air conditioning.
- Radiological Sciences Laboratories have been upgraded with state-of-the-art imaging equipment such as a 3.0T MRI and EPIQ7 Ultrasound ([10](#)).
- An Imaging Analysis Station with advanced MAC computers and MATLAB software is available for research.
- A lab committee oversees usage, equipment maintenance, and updates based on student surveys and needs ([11](#)).
- Students benefit from access to simulation equipment, phantoms, and high-performance workstations for diagnostic imaging and research projects.
- Students have access to classrooms, computer labs, a library with radiological sciences resources, and digital platforms like Blackboard ([12](#)).
- Workshops and auditorium spaces are available for academic presentations and thesis defenses.
- Orientation and training are provided for students and staff to use labs, equipment, and Learning Management System (LMS) effectively.
- Safety measures include fire safety systems, radiation protection, infection control, and ergonomic support in labs.
- Policies are in place for managing hazardous waste and securing department facilities with keyless locks and surveillance.
- E-learning is available via Blackboard Ultra and other platforms in case of emergencies, with guides and technical support ([12](#)).
- Annual surveys help assess the effectiveness of facilities and resources; results are used to implement improvements.

Resources

1. The Saudi Commission for Health Specialties (SCFHS). <https://scfhs.org.sa/en>
2. The Education and Training Evaluation Commission (ETEC) in Saudi Arabia. <https://www.etec.gov.sa/en/home>
3. Teaching and Learning Strategies Handbook. https://vp-academic-affairs.kau.edu.sa/Files/838/Files/162589_learning_and_teaching_stratigies_in_kau_ar.pdf
4. Deanship of Graduate Studies. [عمادة الدراسات العليا - دليل الدراسات العليا باللغة العربية 2022](#)
5. Deanship of Graduate Studies. [عمادة الدراسات العليا - دليل الشؤون الأكاديمية](#)
6. King Abdulaziz University. Deanship of Graduate Studies. [عمادة الدراسات العليا | جامعة الملك عبد العزيز | المملكة العربية السعودية](#)
7. King Abdulaziz University. Deanship of Admission and Registration. [عمادة القبول والتسجيل | جامعة الملك عبد العزيز | المملكة العربية السعودية](#)
8. King Abdulaziz University. Career Guidance and Employment Support Center. [مركز الارشاد المهني والدعم الوظيفي - الصفحة الرئيسية](#)
9. King Abdulaziz University. Deanship of Students' Affairs. [عمادة شؤون الطلاب | جامعة الملك عبد العزيز | المملكة العربية السعودية](#)
10. Radiologic Sciences Department Facilities Overview Guide: <https://drive.google.com/file/d/1bzyYwrb1XRUK7S6-cCuKxbl66Z6citu1/view?usp=sharing>
11. General Policies for the Use of Radiologic Sciences Department's laboratories. <https://drive.google.com/file/d/1k4ef6oTk2XmlvfcXLtAVZSIUMoyx3mG6/view?usp=sharing>
12. King Abdulaziz University. Deanship of e-learning and Distance Education. [عمادة الطالب – Blackboard التعلم الإلكتروني والتعليم عن بُعد - أدلة أدوات نظام إدارة التعلم الإلكتروني](#)

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