

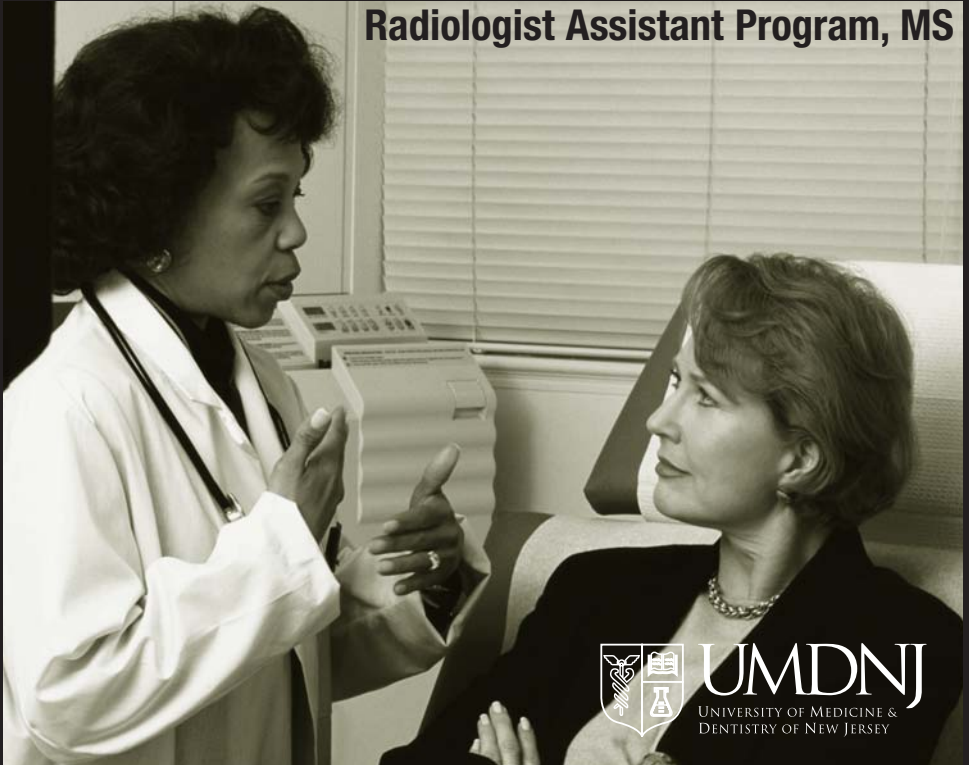


it's all
about

Choices...

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School of Health Related Professions
Radiologist Assistant Program, MS



UMDNJ
UNIVERSITY OF MEDICINE &
DENTISTRY OF NEW JERSEY

Choices...

Students who choose UMDNJ's School of Health Related Professions want a University that is exclusively dedicated to health care, with state-of-the-art equipment, rigorous coursework, and faculty who care. All our resources go toward supporting a health care educational environment that attracts and nurtures the very best faculty and students.

Description of the Profession*

A radiologist assistant is an advanced- level radiologic technologist who enhances patient care by extending the capacity of the radiologist in the diagnostic imaging environment. The radiologist assistant is an ARRT- certified radiographer who has completed an advanced academic program encompassing a nationally recognized radiologist assistant curriculum and a radiologist-directed clinical preceptorship. With radiologist supervision, the radiologist assistant performs patient assessment, patient management, fluoroscopy and other radiology procedures. The radiologist assistant also makes initial observations of diagnostic images, but does not provide an official interpretation. Radiologist assistants can provide their service in a variety of medical settings where the radiologist is responsible for the interpretation of the procedures.

* From The Radiologist Assistant: Improving Patient Care While Providing Work Force Solution, Consensus Statement from the Advanced Practice Advisory Panel March 9-10, 2002, Washington, D.C.

The UMDNJ-SHRP's Radiologist Assistant Program

The Radiologist Assistant Program is based on the Newark campus. The program begins every September and covers both clinical and didactic instruction on either a full time or part time basis. The full time option is designed to be completed in 15 months while the part time option is designed to be completed in 3 years. All course requirements for graduation must be completed within 4 years of starting the program for both full time and part time students.

Upon the successful completion of the program, the graduate will receive a Master of Science degree from UMDNJ-SHRP.

Mission and Program Philosophy Statements

What is the mission of UMDNJ?

The University's mission is to promote professional standards of excellence among students and health care professionals by meeting the health needs of New Jersey citizens through the coordination of education, research and community service.

Accreditation Status

The School of Health Related Professions, as part of UMDNJ, is fully accredited by the Commission of Higher Education of the Middle States Association of Colleges and Schools. This is a voluntary, non-governmental, peer-based membership organization dedicated to educational excellence and improvement through peer-evaluation and accreditation. The commission is a recognized leader in promoting and ensuring quality assurance and improvements in higher education. It defines, maintains, and promotes educational excellence and responds creatively to a diverse, dynamic, global higher education community that is continually evolving. The American Registry of Radiologic Technologist (ARRT) has just recently created accreditation standards for Radiologist Assistant programs. The program is in the process of applying for accreditation. The American Society of Radiologic Technologist (ASRT), the American Registry of Radiologic Technologist (ARRT), the American College of Radiology (ACR) as well as others are working to ensure the RA is appropriately educated, credentialed and accepted by the health care community and regulatory bodies.

Clinical Affiliations

The Radiologist Assistant Program provides experiences within a variety of health care settings by utilizing several healthcare facilities throughout New Jersey and the nation. Clinical experiences are designed to ensure that students are exposed to a comprehensive breadth and depth of Radiology procedures.

Transportation and Living Accommodations

The Radiologist Assistant program is located in Newark, New Jersey, which is easily accessible by mass transit, and via highways such as the Garden State Parkway, New Jersey Turnpike and Route 280. Clinical experience sites are located throughout New Jersey. A car is recommended for travel to clinical sites. The university does not have housing accommodations for students in any of its schools. The proximity of UMDNJ to New York City extends opportunity for varied entertainment and recreational activities for students.

Admission Requirements - Master of Science Radiologist Assistant

Selection for admissions is a competitive process that is the responsibility of the faculty. Decisions are based on a composite of the applicant's overall academic ability, including achievement in professional and science courses. Aptitude in oral and written self expression; personal characteristics such as leadership potential; and life and work experiences are also considered.

In order to qualify for admission, applicants must meet the following requirements:

- Completion of introduction to Pathophysiology, Human Disease or equivalent course
- Graduated from a Joint Review Committee on Education in Radiologic Technology approved Diagnostic Radiography program
- Earned bachelorate degree with an accumulative grade point average of 3.0 or higher
- Possess an up to date New Jersey Diagnostic Technologist license and/ or current registration by the American Registry of Radiologic Technologists (to determine NJ state license eligibility contact the Department of Environmental Protection Bureau of Radiological health at 609-984-5890)
- Employed as a radiographer for a minimum of three consecutive years
- Identify a radiologist to serve as your preceptor (academic/clinical). Please refer to application package document titled "Clinical Preceptorship Memorandum of Understanding for a Radiologist Assistant student."
- Provide three letters of recommendation
- Interview successfully
- Provide personal statement
- Provide proof of current BCLS certification.
- Applicants must submit a notarized copy of current registry and state licensure.

The school does not discriminate against qualified individuals on the basis of race, creed, national origin or disability. The University recognizes the value of diversity and is committed to providing appropriate support to its student body. The disability compliance coordinator can be reached at 973-972-8594.

Where do I apply for admission?

Application information is available at (973) 972-5454 or via E-mail at shrpadm@umdnj.edu.

UMDNJ, School of Health Related Professions
Office of Enrollment Services
65 Bergen Street
Room 149
Newark, NJ 07107-3001.

For more specific information contact the program at:

UMDNJ-School of Health Related Professions
Master of Science Radiologist Assistant
Gladys Montane, Program Director
65 Bergen Street
Newark, NJ 07107

Tel: (973) 972-4821 or via E-mail at: RAPRGM@umdnj.edu

Is an interview required?

Yes, you will be interviewed prior to acceptance into this program. The Program Coordinator will generally conduct an in person interview before admission.

What is the application deadline?

The application and all supporting documents must be received by the Office of Enrollment Services by May 1st. Supporting documents include a notarized copy of current registry and New Jersey State License, 3 letters of recommendation, 1 signed preceptor agreement form, official radiography and bachelorate degree transcripts, and written statement by the applicant as to why they are interested in pursuing the Radiologist Assistant Master of Science Program including short and long term career goals.

What are the other requirements?

Since SHRP offers Web courses, you are required to be computer literate upon enrollment in the program. You must also have remote (off-campus) access to Internet services, to include at least web browsing capability and e-mail. To obtain the most up-to-date hardware and software requirements go to the SHRP web site: <http://shrp.umdnj.edu> and click on technical requirements.

Where do I register?

Students can register via the internet. For on-line registration visit the SHRP website at <http://shrp.umdnc.edu>

Who will advise me during the program?

Upon admission to the program students will meet with the program director for advisement. The director will be responsible for the advisement of all students during the first year. In the following years each student will be assigned to a full-time faculty member as their advisor.

The Office of Students Services provides academic counseling and selected tutorial services. It also houses the Educational Opportunity Fund (EOF) and provides consultation for students who have disabilities. Students in need of academic counseling can call 973-972-4136 and 973-972-5039 for tutorial or other support services.

Can I take course work full-time or part-time?

The 50 credit curriculum is a combination of didactic and clinical courses designed to be completed on either a full time or part time basis. The curriculum is designed to be completed in 15 months for full time students and 3 years for part time students. All course requirements for graduation must be completed within 4 years of starting the program for both full time and part time students. Completion within this time frame is crucial if students are to remain up to date in the extremely dynamic field of Radiology. The goal of completing the program in four years is an important aspect of the curriculum due to the advanced practice skills that have to be attained.

The RA curriculum was developed based on guidelines and content proposed in the ASRT curriculum plan. The curriculum is divided into specific content areas that represent the essential components of an RA program.

What if I am a foreign applicant?

If you were educated outside of the United States, you must provide the following additional documents:

- Official transcripts from the foreign university
- Evaluation of your foreign transcript. You may obtain an evaluation by contacting World Education Services, Inc. at www.wes.org or by e-mail at info@wes.org.
- Results of test scores from the Test of English as a Foreign Language (TOEFL) exam. SHRP requires a minimum score of 550 on the written exam, 213 on the computer-based exam, or 79-80 on the internet-based exam. Minimum scores may vary by program.

Am I required to pay for health insurance coverage?

All full-time students and part-time students who participate in a clinical experience are required to have insurance coverage. You will be billed by UMDNJ for coverage, unless you complete a waiver proving comparable coverage before the deadline date. Otherwise you will be required to purchase the University's recommended policy.

Master of Science Radiologist Assistant Program Professional Curriculum *Curriculum Plan for Fulltime Students*

First Year

Semester	Course	Credits
Fall I	Imaging Pathophysiology & Clinical Pathways I	3
	Pathophysiology for Radiology Assistants	3
	Radiation Safety, Radiobiology and Health Physics	2
	Physics of Radiography & Fluoroscopy	1
	Patient Assessment, Management & Education	3
	Law Regulation & Risk Management	<u>1</u>
	Subtotal	13

Spring I	Imaging Pathophysiology & Clinical Pathways II	3
	Advanced Patient Care & Pharmacology	4
	Roles & Responsibilities in Radiology Procedures, Techniques & Quality Care	3
	Clinical Preceptorship and Image Evaluation I	<u>3</u>
	Subtotal	13

Summer I	Imaging Pathophysiology & Clinical Pathways III	3
	Clinical Preceptorship and Image Evaluation II	<u>3</u>
	Subtotal	6

Second Year

Fall II	Imaging Pathophysiology & Clinical Pathways IV	3
	Evidence Based Literature Review	3
	Clinical Preceptorship and Image Evaluation III	<u>3</u>
	Subtotal	9

Spring II	Clinical Internship (400 hours)	<u>9</u>
	Subtotal	9
	Total	50 credits

Curriculum Plan for Part Time Students

First Year

Semester	Course	Credits
Fall I	Imaging Pathophysiology & Clinical Pathways I	3
	Pathophysiology for Radiology Assistants	<u>3</u>
	Subtotal	6
Spring I	Imaging Pathophysiology & Clinical Pathways II	3
	Roles & Responsibilities in Radiology Procedures, Techniques & Quality Care	<u>3</u>
	Subtotal	6
Summer I	Imaging Pathophysiology & Clinical Pathways III	3
	Subtotal	3

Second Year

Fall II	Radiation Safety, Radiobiology and Health Physics	2
	Patient Assessment, Management & Education	3
	Law Regulation & Risk Management	<u>1</u>
	Subtotal	6

Spring II	Advanced Patient Care & Pharmacology	4
	Clinical Preceptorship and Image Evaluation I	<u>3</u>
	Subtotal	7

Summer II	Clinical Preceptorship and Image Evaluation II	<u>3</u>
	Subtotal	3

Third Year

Fall III	Physics of Radiography & Fluoroscopy	1
	Imaging Pathophysiology & Clinical Pathways IV	3
	Evidence Based Literature Review	<u>3</u>
	Subtotal	7

Spring III	Clinical Preceptorship and Image Evaluation III (135 hours)	<u>3</u>
	Subtotal	3

Summer III	Clinical Internship	<u>9</u>
	Subtotal	9

Total 50 credits

Course Descriptions

Patient Assessment, Management and Education **3 Credits**

This course reinforces the use of the clinical thinking model to aid in patient assessment to include interviewing skills and evaluation techniques. The focus is on the application of anatomy and physiology knowledge to assist in patient assessment and management. Didactic and simulated clinical case based learning is utilized to impart methods of patient education. Workshops are conducted on how to review patient medical data, perform physical assessment, and obtain and analyze vital signs.

Advanced Patient Care and Pharmacology **4 Credits**

This course is designed to enhance the radiologist assistant's knowledge of pharmaceuticals commonly used by and given to radiology patients. The content addresses the intent of the drug and its effect on diseases, conditions and physiology. The laws and policies related to pharmaceuticals in a radiology practice setting will be presented. In depth information on contrast media used during common diagnostic procedures is presented. Topics include an overview of the chemical makeup and physical properties of select contrast agents, selection of contrast agents for given exams, patient risk factors, pre-medication strategies, indicators/symptoms of a patient contrast media reaction and recommendations for care and treatment of patients experiencing an adverse reaction to a given contrast agent.

Pathophysiology for Radiology Assistants **3 Credits**

A thorough exploration of the characteristics and manifestations of disease caused by alterations or injury to the structure or function of the body. Concepts basic to pathophysiology as well as common disease conditions are studied and serve as prototypes in understanding alterations that occur in the major body systems. Emphasis is placed on the characteristic manifestations and image correlation with these pathologies observed through diagnostic imaging.

Imaging Pathophysiology & Clinical Pathways I, II, III, & IV **3 Credits per course**

Methods and techniques for the systematic observation of static and dynamic diagnostic images for the purpose of evaluating the presence of abnormalities, anomalies and pathological conditions is presented.

Protocols for drafting memoranda of initial observations based on image assessment is included. This course also focuses on clinical pathways as multidisciplinary plans of best clinical practice for specific groups of patients with a particular diagnosis that aid the coordination and delivery of high-quality care. Clinical pathway components include a timeline, the categories of care or activities and their interventions, intermediate and long-term outcome criteria, and the variance record.

Roles & Responsibilities in Radiology Procedures, Techniques & Quality of Care **3 Credits**

A study of examination procedures based on American College of Radiology Guidelines for principles and practices producing high-quality radiographic care. Content establishes a framework for radiologist assistant participation in patient examinations for the purpose of diagnostic inspection and/or therapeutic treatment. Guidelines for reporting initial observations made by the radiologist assistant during radiology procedures and image assessment are also presented. The radiologist assistant role in the systematic analysis of the quality of care - the diagnosis and treatment, the resources, procedures and resulting outcomes, including the patient's quality of life will be discussed. Topics of sensitivity and specificity as they relate to diagnostic testing will be presented. Predictive values, prior probability and bias as they relate to the analysis of information obtained from diagnostic testing will also be discussed.

Physics of Radiography & Fluoroscopy **1 Credit**

Content promotes the conscientious operation of the fluoroscopic device used in diagnostic/therapeutic patient exams. Content complements guided practice in operating the fluoroscopic device. Analysis of the functional components of fixed and mobile fluoroscopic devices heightens operator awareness of the features and limitations of this imaging medium. Procedures and techniques to optimize image quality while reducing potential radiation exposure to patients, operator and ancillary personnel are included.

Radiation Safety, Radiobiology and Health Physics **2 Credits**

Content is designed to impart an understanding of protection of individual and population groups against the harmful effects of ionizing and non-ionizing radiation. This includes an overview of the regula-

tory bodies and patient radiation safety regulations affecting the modern diagnostic imaging environment. The effect of ionizing radiations on biological samples will be included. Interaction of ionizing radiation with matter, units of exposure and dose, radiation detection and measurement devices will be discussed. Practical techniques and QA/QC procedures for reducing patient and operator risk of exposure to ionizing radiation will be introduced.

Clinical Preceptorship and Image Evaluation I , II , & III

3 Credits per course

Mentored clinical experience is the cornerstone in the development of the radiologist assistant. RA students work closely with radiologist mentors to maximize the learning opportunities available in the clinical environment. The RA student and radiologist mentor collaborate to establish goals and expectations for this portion of the curriculum. A clear understanding of the degree of autonomy in the performance of diagnostic/therapeutic procedures and the assistant's contribution to the radiologist's final diagnosis of these procedures is essential to the clinical experience.

Evidence-Based Literature Review

3 Credits

Provides foundation skills in research-oriented bibliographic inquiry, with an emphasis on evidence-based review and synthesis of applicable literature. Principles of effective scientific communication are also addressed, including how to plan, organize and write structured review articles.

Clinical Internship

9 Credits

This is the final mentored clinical experience in the development of the radiologist assistant. The radiologist mentors will be available to continue maximizing the learning opportunities in the clinical environment. The RA student and radiologist mentor will collaborate to establish goals and expectations for this portion of the curriculum. However, the RA student will be working more independently.

Law, Regulations, and Risk Management

Credits 1

The content of this course serves to refresh the knowledge of the R.T. with the law, regulatory issues, and patient information management in today's health care culture. Advanced legal terminology, concepts, principles and regulatory issues will be examined (Web-based hours directed study).

Graduation requirements

- **Comprehensive Examination:** Students must pass a comprehensive examination, which is designed to test the fundamental knowledge of students in the area of patient care, pharmacology, patient assessment, radiobiology, physics and instrumentation, pathophysiology, radiology procedures, and other topics related to the area of specialization of Radiologist Assistants
- ACLS certification
- Community Service
- Submission of research/article for publication (example: Journal of the American Society of Radiologic Technologists)

Tuition and Financial Aid

The UMDNJ Board of Trustees approves tuition and fees on an annual basis. Current tuition and fees may be obtained by going to <http://shrp.umdnj.edu>.

Is financial aid available?

Yes. Information about financial aid is available from the Newark Campus Financial Aid Office: ADMC 1208, 30 Bergen Street, Newark, New Jersey 07107-3001. Telephone: (973) 972-4376 or at http://www.umdnj.edu/studentfinancialaid/index_new_brow.htm.

Scholarship assistance may also be available through the ASRT. The web site is www.asrt.org.

For More Information on the Master of Science Radiologist Assistant Program Please Contact:

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You may also want to visit our web site at <http://shrp.umdnj.edu> and click on programs and graduate programs.

