Nuclear Medicine Technology

Director
• Jay J. Smith

Director, Medical
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Undergraduate major: nuclear medicine technology (BS)
Website: https://medicine.uiowa.edu/radsci/programs/nuclear-medicine-technology

Courses

RSNM:3120 Nuclear Medicine and PET Clinical Procedures I 3 s.h.
Introduction to medical specialty of nuclear medicine and molecular imaging; basic theories of radiation protection,
radiation physics and nuclear medicine instrumentation, radiopharmacy, nuclear medicine and positron emission
tomography (PET) clinical procedures, professional standards of nuclear medicine technologist. Requirements: Nuclear
Medicine Technology Program enrollment.

RSNM:3121 Nuclear Medicine Technology Clinical Internship I 3 s.h.
Hands-on clinical experience working with patients and performing routine nuclear medicine diagnostic imaging
procedures under direct supervision of qualified clinical instructors. Requirements: Nuclear Medicine Technology Program enrollment.

RSNM:3131 Radiopharmaceuticals 3 s.h.
Introduction to radiopharmaceuticals; emphasis on physical, chemical, and biologic properties and their clinical use;
fundamental aspects of radiopharmaceuticals including characteristics, preparation, quality control, and clinical use.
Requirements: Nuclear Medicine Technology Program enrollment.

RSNM:3140 Foundations in Nuclear Medicine and PET 1 s.h.
Foundational instruction in the math and chemistry associated with radiopharmacy and instrumentation in the nuclear
medicine technology profession, such as positron emission tomography (PET). Requirements: Nuclear Medicine Technology Program enrollment.

RSNM:3220 Nuclear Medicine and PET Clinical Procedures II 3 s.h.
Proper execution of nuclear medicine and positron emission tomography (PET) procedures from a technical point of view;
published protocols and procedures specific to University of Iowa Health Care; routine setup, common errors, artifact
identification, computer processing protocols, and patient care concerns identified for each procedure; review of
human anatomy, physiology, and pathology germane to understanding and proper execution of nuclear medicine
procedures. Prerequisites: RSNM:3120. Requirements: Nuclear Medicine Technology Program enrollment.

RSNM:3221 Nuclear Medicine Technology Clinical Internship II 3 s.h.
Progressive responsibility working with patients and performing nuclear medicine and PET clinical procedures under direct supervision of qualified clinical instructors. Prerequisites: RSNM:3121. Requirements: Nuclear Medicine Technology Program enrollment.

RSNM:3231 Nuclear Medicine Instrumentation 3 s.h.
Instruments used in medical imaging to generate and detect ionizing radiation (i.e., SPECT/CT and PET/CT scanners, dose
calibrators, well counters, survey meters); focus on instrument quality control testing. Requirements: Nuclear Medicine Technology Program enrollment.

RSNM:3320 Foundations in Nuclear Medicine Instrumentation 2 s.h.
Instruction in physics and statistics associated with nuclear medicine and positron emission tomography (PET) instrumentation. Prerequisites: RSNM:3220. Requirements: Nuclear Medicine Technology Program enrollment.

RSNM:3321 Nuclear Medicine Technology Clinical Internship III 4 s.h.
Progressive responsibility working with patients and performing nuclear medicine and PET clinical procedures under direct supervision of qualified clinical instructors. Prerequisites: RSNM:3221. Requirements: Nuclear Medicine Technology Program enrollment.

RSNM:3421 Nuclear Medicine Technology Clinical Internship IV 4 s.h.
Progressive responsibility working with patients and performing nuclear medicine and PET clinical procedures under direct supervision of qualified clinical instructors. Prerequisites: RSNM:3321. Requirements: Nuclear Medicine Technology Program enrollment.

RSNM:4221 Nuclear Medicine Technology Clinical Internship V 4 s.h.
Progressive responsibility working with patients and performing nuclear medicine and PET clinical procedures under direct supervision of qualified clinical instructors. Prerequisites: RSNM:4121. Requirements: Nuclear Medicine Technology Program enrollment.

RSNM:4222 Nuclear Medicine Technology Capstone and Certification Exam Preparation 6 s.h.
Students in final semester of program work together to organize and deliver capstone and certification exam
preparation course; review of specific topics and oral presentations by each student; preparation and distribution of
detailed written outlines of exam content; series of content-specific quizzes, midterm, and final "Mock Board" exam to
evaluate student learning and preparedness for taking the NMTCB and ARRT national certification exams; preparation
and submission of capstone portfolios that provide evidence of scholarly and professional progress. Requirements: Nuclear Medicine Technology Program enrollment.