NUCLEAR MEDICINE, ASSOCIATE OF APPLIED SCIENCE

A Nuclear Medicine technologist is the health professional responsible for performing nuclear medicine examinations that assist the physician in the diagnosis and treatment of various diseases. The trained nuclear medicine technologist prepares and administers radiopharmaceuticals and performs patient imaging procedures using radiation detection devices. Technologists provide data analysis and patient information to the physician. The nuclear medicine technologist may be employed in hospitals, clinics, imaging centers, physician's offices, education, research and manufacturing. Graduates of the program may be eligible for the American Registry of Radiologic Technologists (ARRT) examination for Nuclear Medicine and/or the Nuclear Medicine Technology Certification Board examination (NMTCB). The program is accredited by the Joint Review Committee on Educational programs in Nuclear Medicine Technology.

Program contact: Learn more

Program Admission Requirements

Application may be submitted to the Health Careers Enrollment Center 216-987-4247, after meeting the following requirements and while enrolled in the last prerequisite course needed:

- High School Diploma/GED and be at least 18 years of age.
- All math and science courses must have been completed within the past seven years at the time the Nuclear Medicine application is submitted. Math and science courses completed over seven years prior to the date of application may not be used to meet admission requirements.
- Complete the following courses with a 2.5 GPA or higher:

Code	Title	Credit Hours
BIO-2331	Anatomy and Physiology I	4
BIO-2341	Anatomy and Physiology II	4
Select from one of the following:		5
CHEM-1300 & CHEM-130L	General Chemistry I and General Chemistry Laboratory I [1]	
CHEM-130H	Honors General Chemistry I	
PHYS-1050	Everyday Physics [2]	2
MATH-1530	College Algebra (or higher)	4
Select one of the following:		3
ENG-1010	College Composition I	
ENG-101H	Honors College Composition I	

1 Students with high school or previous chemistry coursework should take Chemistry Placement Test to qualify for CHEM-1300. Students with no chemistry coursework will need to take CHEM-1010 Introduction to Inorganic Chemistry before enrolling in CHEM-1300.

2 PHYS-1210 College Physics I will be accepted in place of PHYS-1050 for those students intending to transfer to a four year institution.

Other Information

- A 2.50 prerequisite GPA must be maintained while waiting for entry into the first program major course. After admission to the program, a 2.75 overall GPA or higher must be maintained.
- Two 4 hour clinical observations. Details of observation requirements can be found at http://www.tri-c.edu/programs/health-carers/nuclear-medicine/documents/observation-form.pdf. Details for completion will be provided at the Orientation prior to the start of the program.
- Approximately 16 students admitted - varies depending on space available at clinical facilities.
- Evidence of current certification in the Basic Life Support (CPR) course for Health Care Providers (adult, child, and infant) according to the American Heart Association standards will be required prior to receiving clinical assignment the second year of the program. Details will be provided at the Orientation prior to start of curriculum.
- Candidates will be required to present evidence of good health verified by a physical examination prior to entering clinical training the second year of the program. Please refer to Health Requirements for Western Campus Health Career Students.
- One admission requirement course may be repeated one time to improve a grade below 2.5 gpa. A "W" is counted as an attempt.
- All students enrolled in Health Career and Nursing programs requiring off campus clinical experiences are required to complete a background check that includes fingerprinting and a court search. Log onto http://www.tri-c.edu/programs/health-careers/background-check-information-bci.html for further information. Please be assured that this information will be kept confidential.
- After Program Acceptance: Details will be provided at Orientation prior to the start of the program on when to complete HAZMAT, CPR, immunizations and physical exams.

Program Learning Outcomes

This program is designed to prepare students to demonstrate the following learning outcomes:

1. Communication: Use effective verbal, non-verbal and written communication skills to provide comprehensive patient care in a healthcare team environment.
2. Safety: Prepare, record, administer and dispose of radioactive materials according to regulatory guidelines to ensure safety of patients, co-workers and the general public.
3. Patient Care: Demonstrate comprehensive patient care skills to provide safe, efficient and high quality nuclear medicine services.
4. Technical Skills: Apply general science knowledge to demonstrate the proper and safe use of equipment and instrumentation for diagnostic and therapeutic applications within the scope of nuclear medicine practice.

5. Eligibility for Professional Certification: Sit for Nuclear Medicine Technology Certification Board (NMTCB) and/or American Registry of Radiologic Technology [N] (ARRT) and apply for state licensure as required by individual state law.

Suggested Semester Sequence

Program Admissions Requirements Semester		**Credit Hours**
BIO-2331	Anatomy and Physiology I	4
BIO-2341	Anatomy and Physiology II	4
PHYS-1050	Everyday Physics [1]	2
Select one of the following:		5
CHEM-1300 & CHEM-130L	General Chemistry I and General Chemistry Laboratory I	
CHEM-130H	Honors General Chemistry I	
Select one of the following:		3
ENG-1010	College Composition I	
ENG-101H	Honors College Composition I	
Select one of the following:		4
MATH-1530	College Algebra [2]	
MATH-153H	Honors College Algebra	
	Credit Hours	22
First Semester		
MA-1010	Introduction to Medical Terminology	2
NMED-1010	Nuclear Medicine Math and Statistics [3]	1
NMED-1100	Computers in Nuclear Medicine	1
NMED-1301	Nuclear Medicine Procedures I	3
NMED-130L	Nuclear Medicine Laboratory I	1
NMED-1501	Radiation Physics	2
NMED-1603	Nuclear Radiopharmacy and Pharmacology	3
NMED-1701	Nuclear Medicine Instrumentation	3
	Credit Hours	16
Second Semester		
NMED-1200	Radiation Safety & Biology	2
NMED-1401	Patient Care for Nuclear Medicine	1
NMED-1770	Immunology and Pathophysiology for Sectional Imaging	2
NMED-1780	Sectional Anatomy for Advanced Molecular Imaging	2
NMED-2301	Nuclear Medicine Procedures II	3
NMED-230L	Nuclear Medicine Laboratory II	1
NMED-2600	Molecular and Fusion Imaging	2
NMED-2660	Nuclear Medicine Therapy	1
	Credit Hours	14
Summer Session		
NMED-2700	Nuclear Medicine Research Methods	1
NMED-2940	Nuclear Medicine Field Experience I	3
Select one of the following:		3
PHIL-2050	Bioethics	
PHIL-205H	Honors Bioethics	
	Credit Hours	7
Third Semester		
NMED-2950	Nuclear Medicine Field Experience II	4
Select one of the following:		3
ENG-1020	College Composition II	
ENG-102H	Honors College Composition II	
	Credit Hours	7
Fourth Semester		
NMED-2960	Nuclear Medicine Field Experience III [4]	4
One of the following:		3
PSY-1010	General Psychology	
PSY-101H	Honors General Psychology	
	Credit Hours	7
	Total Credit Hours	73

1 MATH-1800 Special Topics in Mathematics-MATH-1820 Independent Study/Research in Mathematics may not be used to meet this requirement.

2 PHYS-1210 College Physics I will be accepted in place of PHYS-1050 Everyday Physics.

3 Students must earn a "C" or higher in all Nuclear Medicine courses to be awarded the AAS degree in Nuclear Medicine Technology.