NUCLEAR MEDICINE TECHNOLOGY

Associate in Applied Science Degree | Career Program | Department of Engineering, Physics & Technology

Affiliated with Montefiore The University Hospital for the Albert Einstein College of Medicine

Program Director: Professor Alfred Romito

This rewarding technology field involves collaboration and interactions with highly specialized people, the operation of sophisticated instruments, and excellent salaries. Nuclear Medicine is a relatively new branch of medicine that uses isotopes for the diagnosis and treatment of certain diseases.

The Nuclear Medicine Technologist assists the physician in the operation of the gamma camera, the positioning of patients under the gamma camera, and in the calculation of the isotope doses to the patients.

In recent years, improved diagnoses of many important diseases have been achieved by methods used in Nuclear Medicine. These include diseases involving the liver, gastrointestinal tract, and spleen; disorders of the bone vertebral column, and the heart and cardiovascular system; and localization of tumors using the new and exciting field of Position Emission Tomography. The number of nuclear medicine procedures in hospitals has been increasing over the past few years.

The Nuclear Medicine Technology program is accredited by the Joint Review Committee on Educational Programs in Nuclear Medicine Technology (JRCNMT), nationally recognized by the Council for Higher Education Accreditation (CHEA).

The minimum acceptable cumulative G.P.A. for entering specialization requirement courses of the Nuclear Medicine Technology Program is 2.7 (B-). For students transferring from another college, grades received from transferred courses will be used in the calculation of their effective index. Transferred courses may not include NMT designated courses.

Upon the completion of the program at Bronx Community College, students are required to pass one of two national registry examinations to become identified as a Registered Nuclear Medicine Technologist and to practice as a Nuclear Medicine Technologist. Further study in this field is possible in institutions offering a baccalaureate degree in Nuclear Medicine Technology. The program articulates with New York City College of Technology and SUNY Empire State College. Visit the Transfer Planning web site for more information.

Nuclear Medicine Graduate Outcomes

Percentage of Students Successfully Passing the The American Registry of Radiologic Technologists (ARRT) and the Nuclear Medicine Technology Certification Board (NMTCB)Accreditation Exams:

Year	ARRT		
	Number of Examinees	Passed	%
2010	10	9	90
2011	12	9	75
2012	8	7	88
2013	9	8	89
2014	6	7	83

Year	NMTCB		
	Number of Examinees	Passed	%
2010	14	14	100
2011	10	9	90
2012	6	6	100
2013	6	6	100
2014	8	7	88

Year of Program Entry	# Initially Enrolled
2010	18
2011	14
2012	14
2013	13
2014	15

Year of Program Entry	# Graduated
2010	11
2011	6
2012	7
2013	10
2014	8

Year of Program Entry	Graduation Rate (%)
2010	61%
2011	43%
2012	50%
2013	77%
2014	53%

Average Graduation Rate: 58%

Nuclear Medicine Technology Curriculum (Pathways)
63 Credits required for A.A.S. Degree

Required Core

A. **English Composition**
- **ENG 10** Fundamentals of Composition and Rhetoric
  OR
  ENG 11 Composition and Rhetoric I (3 Credits)

B. **Mathematical and Quantitative Reasoning**
- **MTH 30** Pre-Calculus Mathematics (4 Credits)

C. **Life and Physical Sciences**
- **BIO 23** Human Anatomy and Physiology I (4 Credits)

Flexible Core

A. **World Cultures and Global Issues**
- **HIS 10** History of the Modern World *OR*
  HIS 11 Introduction to the Modern World (3 Credits)

D. **Individual and Society**
- **COMM 11** Fundamentals of Interpersonal Communication (3 Credits)

E. **Scientific World**
- **BIO 24** Human Anatomy and Physiology II (4 Credits)

Additional Flexible Core course
- **CHM 17** Fundamentals of General Chemistry I (4 Credits)

SUBTOTAL 25

Required Areas of Study
- **ART 10** Art Survey *OR*
  MUS 10 Music Survey
  (1 Credit)
- **BIO 22** Medical Terminology (2 Credits)
- **LAW 45** Medical Law (3 Credits)
- **PHY 24** Principles of General Physics (4 Credits)

SUBTOTAL 10

Specialization Requirements
- **NMT 78**[1] EKG – Interpretation and Techniques (2 Credits)
- **NMT 79**[1] Phlebotomy (2 Credits)
- **NMT 71** Nuclear Medicine Laboratory (1 Credit)
- **NMT 81** Orientation to Nuclear Medicine (3 Credits)
- **NMT 82** Radio-Pharmaceutical Chemistry (3 Credits)
- **NMT 83**[1] Radiation Physics and Dosimetry (3 Credits)
- **NMT 84** Radiation Biology (2 Credits)
- **NMT 85**[1] Nuclear Medicine Procedures (2 Credits)
- **NMT 86** Didactic Nuclear Medicine (1 Credit)
- **NMT 87**[1] Clinical Nuclear Medicine I (3 Credits)
- **NMT 88** Senior NMT Seminar (3 Credits)
- **NMT 90**[1] Clinical Nuclear Medicine II (3 Credits)

SUBTOTAL 28

[1] Parts or all of these courses are taught at Montefiore Medical Center including NMT 78, 79. NMT 71 and 81-88 are taught sequentially, although listed concurrently. These instructional hours for NMT 81-84 generally extend from January through May, just prior to the start of clinical training. Students may not register for any NMT course without permission of the program Director.