

# *Allied Health*

# Nuclear Medicine

## (Molecular Imaging)

*A nuclear medicine technologist plays an important role in the diagnosis and treatment of disease. Specific job functions include preparation and administration of radiopharmaceuticals to visualize and define the physiology of the cardiac, bone, liver and other organ systems. You will combine your knowledge of computers with your desire to help people. Graduates work in hospitals and in the industry of private laboratories.*

*The Nuclear Medicine Program is accredited by the Joint Review Committee on Educational Programs in Nuclear Medicine Technology, 2000 W. Danford Rd., STE 130 #203 Edmond, OK 73003. The telephone number is (405) 285-0546.*

### **You'll Learn**

- To calculate dosage and administer radiopharmaceuticals
- Subject matter covered on national certification examinations
- The operation of imaging devices using radionuclides in a variety of techniques
- The integration of mathematics, anatomy, physiology, physics and chemistry in health care
- To develop additional skills and abilities essential to your success on the job

### **You'll Earn**

- An excellent salary usually starting at \$49,000 per year or higher
- The opportunity for a flexible work schedule part- or full-time
- A choice of work environments including private offices, hospitals, industry and research facilities
- A strong background for educational advancement
- Important status on the health care team and in research

### **You'll Succeed**

- More than half of all new jobs require education beyond high school.
- Employees with degrees have better chances for promotion.
- Associate degree holders generally earn 30 percent more than high school graduates (according to the U.S. Department of Commerce, Census Bureau).
- College credit or advanced placement may be given for relevant work experience.
- Many credits from an associate degree can be applied toward a bachelor's degree.

# Get in, Get smart, Get going. . .

Delaware Tech operates on a semester system with new sessions in late August and mid-January, plus summer sessions beginning at the end of May and in mid-June. Non-technology courses may be taken on a part- or full-time basis during any semester or the summer session. Some students may need refresher courses at the basic or pre-tech level; others may receive transfer credit for prior educational experiences. Counselors and advisors are available to help you schedule your courses.

Allied Health technology programs have a selective admission process, separate from College admission (below), which includes academic criteria of an algebra, biology and chemistry course at 2.5 or greater (high school or college) within the past five years and a GPA of 2.5 or greater. The prerequisite course noted below is a requirement for this specific program. Technology courses are sequential, offered only one time per year and are only open to students who have been admitted into the technology program.

People interested in entering Nuclear Medicine must attend an Allied Health Information Session prior to initiating the process for admission into the technology. Information regarding these sessions may be obtained by calling (302) 283-3100. Visit the Allied Health Web site at [www.dtcc.edu/wilmington/ah](http://www.dtcc.edu/wilmington/ah).

## PROGRAM PREREQUISITE

General Chemistry (CHM 110) within the last five years.

## TECHNICAL COURSES

**Intro to Patient Care** introduces the basic techniques of working in patient care.

**Clinical Nuclear Medicine I, II & III** study current uses of radiopharmaceuticals for organ visualization and function, evaluation of results, pathology and radioassay procedures.

**Cardiovascular Monitoring** gives the student knowledge of underlying coronary disease processes, therapeutic measures and electrocardiographic interpretation used to treat the cardiac patient.

**Intro to Nuclear Medicine** introduces quality control, venipuncture techniques, safety procedures, and computer applications for clinical nuclear medicine.

**Radiobiology & Protection** studies genetic and somatic effects resulting from radiation interactions by presenting principles of radiation therapy related to human injury.

**Clinical Internship I, II and III** give students the opportunity to enhance their training by working, on a rotating basis, in each section of the affiliate hospitals.

**Scan Reading I and II** demonstrate how the work accomplished each day affects the overall patient diagnosis through the review and interpretation of studies performed.

**Nuclear Medicine Instrumentation** applies basic principles of radiation detection through lecture and laboratory sessions, and emphasizes imaging systems, radionuclide statistics, quality control, spect and computer applications.

**Nuclear Physics** examines radionuclide production, radioactive equilibrium, and decay characteristics; and introduces internal radiation dosimetry.

**Radiopharmacy** introduces radiopharmaceutical synthesis, sterility testing, quality control, mechanisms of radionuclide localizations and governmental regulations.

## SUPPORT COURSES

Composition  
Technical Writing & Communication  
Algebra & Trigonometry  
Biomedical Statistics  
Anatomy & Physiology I, II  
Ethical Issues in Health Care  
Physics for Allied Health  
Intro to Computers & Applications  
General Psychology  
Intro to Organic & Biochemistry  
Medical Terminology

## TO APPLY FOR ADMISSION TO THE COLLEGE

1. Obtain an admission application by calling (302) 283-3100. Admission applications are also available online at [www.dtcc.edu/prospective](http://www.dtcc.edu/prospective). Complete and return the application to the Wilmington campus with a \$10 fee.
2. Request that your high school and/or college transcripts be sent to the Wilmington Admissions Office.
3. Arrange to take the Computerized Placement Test (CPT) *unless you have already completed college-level math and English courses with a "C" grade or better*. The CPT is administered by the Admissions Office (302) 571-5343 and is used to determine appropriate course placement.
4. Meet with a Delaware Tech Wilmington campus counselor to discuss your CPT results and select your course schedule.
5. Remember to apply and register early for the best selection of courses.