



**STUDENT HANDBOOK
2025-2026**

**UNC HOSPITALS COMPUTED
TOMOGRAPHY PROGRAM**



UNC HOSPITALS COMPUTED TOMOGRAPHY PROGRAM

The Certificate in Computed Tomography (CT) Imaging program offers comprehensive training in the principles, techniques, and applications of CT imaging technology. Designed to equip participants with the knowledge and practical skills required for a career in the rapidly evolving field of medical imaging, this 9-month intensive program combines theoretical learning with hands-on experience to produce proficient CT technologists.

Throughout the course, students will delve into the fundamentals of CT imaging, including physics principles, radiation safety, patient care, anatomy, and physiology relevant to CT scanning. They will gain a deep understanding of CT scanner operation, image acquisition, and image reconstruction techniques, enabling them to produce high-quality diagnostic images while minimizing radiation exposure.

The curriculum covers a range of topics essential for CT technologists, such as contrast administration, image interpretation, quality control, and emergency procedures. Students will also learn to effectively communicate with patients, medical staff, and other healthcare professionals, ensuring a smooth workflow and patient-centered care.

Hands-on training plays a pivotal role in this program, with ample opportunities for students to apply their knowledge in real-world clinical settings. Under the guidance of experienced instructors and clinical preceptors, students will practice CT scanning techniques, image optimization, and patient positioning, honing their skills to meet industry standards.

Upon successful completion of the program, graduates will be prepared to sit for certification exams, such as the American Registry of Radiologic Technologists (ARRT) CT certification exam, and pursue entry-level positions as CT technologists in hospitals, imaging centers, clinics, and other healthcare facilities.

Whether you're a healthcare professional seeking to specialize in CT imaging or an individual aspiring to launch a rewarding career in medical imaging, this program offers a comprehensive pathway to success in the dynamic field of Computed Tomography.



UNCH CT PROGRAM GOALS AND OBJECTIVES

-
- Establish a systemwide CT training program to create a pipeline of ARRT-certified Technologists
 - Employ Technologists in training and provide both didactic and clinical education.
 - Fill staffing gaps and improve departmental efficiency and care quality.
-

ADMISSION REQUIREMENTS

-
- Employee in training (hired into the CT department)
 - Employee cross-training
 - External student (non-employee)
-

DIVERSITY STATEMENT

The Computed Tomography Program believes a diverse, inclusive, and culturally sensitive learning environment for students is essential to fulfilling our mission. We commit to valuing the diversity of all those we serve, including diversity in race, ethnicity, gender identity, age, gender expression, sexual orientation, religious beliefs, and life experiences.

ADMISSION REQUIREMENTS

Current UNC Radiology employees who are eligible to cross-train in Computed Tomography. At this time, we can only admit a maximum of **6** students.



FACUTLY & STAFF

Wes Kaczmarek, MBA, ARRT (R)(N)(CT), *Computed Tomography Program Director*

Gregory Beavers, Ph.D., MBA R.T. (R)(N)(CT), *Computed Tomography Program Advisory Board*

Affiliate Education Supervisors will be named as we gain sites.

STUDENT FEES AND EXPENSES

The UNC Hospitals Computed Tomography Program is fully supported by the UNC Hospitals and does not require students to pay tuition.

Students will be responsible for the purchase of any textbooks and certification exams.



COMPUTED TOMOGRAPHY SECTION: CLASS SCHEDULE

The CT training will be taking place in person, located in the basement of the Women's and Children's Hospital. There will be the opportunity to view a recording of the class at a later time to accommodate students who are located at an outside affiliate or whose schedule is limited to our classroom schedule.

Midterm and Final Exams will have to be proctored, either at UNC Medical Center or by an appointed AES at one of our affiliates.

Course List:

1. Radiation Safety and Patient Care in CT

- Fundamentals of radiation physics and its implications for CT imaging
- Radiation protection measures for patients, technologists, and staff
- Patient assessment, communication, and care during CT procedures

2. Cross-Sectional Anatomy for CT Imaging

- Comprehensive study of human anatomy relevant to CT imaging
- Identification and visualization of anatomical structures in cross-sectional planes
- Correlation between CT images and anatomical landmarks for accurate interpretation

3. CT Scanner Operation and Image Acquisition

- In-depth understanding of CT scanner components and functionalities
- Hands-on training in CT scanner operation, calibration, and maintenance
- Techniques for optimizing image quality and reducing artifacts in CT

4. Procedures and Protocols in CT Imaging

- Protocol development for various CT examinations (e.g., head, chest, abdomen)
- Patient positioning, immobilization, and monitoring during CT procedures
- Adherence to standardized protocols for ensuring diagnostic accuracy and reproducibility



COMPUTED TOMOGRAPHY - POLICIES AND PROCEDURES

Evaluations and Grading System

The Computed Tomography program utilizes the following grading scale:

| | |
|---|-------------|
| A | 90- 100 |
| B | 80 - 89 |
| C | 70 - 79 |
| D | 60 - 69 |
| F | 59 or below |

Any student making a "D" in any course will be placed on academic probation. To remove that probationary status, the student must earn a minimum of a "C" in all courses the following semester. Failure to achieve a "C" in each course in the following semester will result in automatic dismissal from the CT Program. Grades are converted to a 4.0 scale for the purpose of standardization on the final transcript. **You must make a 2.0 or higher to graduate from the program.**

Dismissal

Students are on general probation throughout the entire course of the program. A student may be judged unacceptable for continuation in the program when he/she has repeatedly displayed a lack of professionalism with respect to patients, other students, technologists, or faculty. If at any time during the course, the student's academic or clinical performance is considered inadequate by the Program Director in collaboration with the Advisory Committee, he/she may be put on formal probation. Students on formal probation are given an action plan to be completed in a determined amount of time, given to the student when he/she is placed on formal probation. If the student fails to



complete or make sufficient progress toward completing the action plan, he/she will be dismissed from the program regardless of grades. All actions are completed in writing, given to the student, and copied to their student record.

Any student who does not meet the attendance requirements for any class or clinical rotation without prior approval from the Program Director will be dismissed from the program.

The UNC Hospitals Computed Tomography Program reserves the right to change the policies and procedures governing the operation of the Computed Tomography Program without prior notification.

RIGHT TO APPEAL

A student may appeal any course grade, probation, dismissal or other action regarding these policies and procedures. He/she must do so in writing to the Program Director within 10 calendar days of notification.

In the event the Medical Director is part of the dismissal process, the student may appeal to Jessica Church of the Radiation Therapy School. Ms. Church will hear from both parties, and his decision will be final.

Policy and procedure acceptance is assumed at registration. The Program Director in conjunction with the Advisory Committee, reserves the right to change these policies at such time that it is deemed necessary for the best interest of the students and the program.

WITHDRAWAL FROM THE PROGRAM

If, for any reason, a student wishes to withdraw from the program, he/she should do so in writing to the Program Director, stating the date of withdrawal and reason(s).



READMISSION POLICY

Any student who withdraws from the program and wishes to re-enter must reapply and be judged under the same criteria as a new applicant. The program must be completed in its entirety with no credit given for prior courses. The program is more than just the sum of its parts and must be completed in the proper series for greatest effect. Special cases will be considered at the discretion of the Program Director.

CONFIDENTIALITY AND PROFESSIONALISM

Confidentiality regarding all patients' diagnoses, treatment, and records must be maintained at all times.

The Radiologic Science Code of Ethics serves as the model by which each Computed Tomography student is expected to conduct themselves professionally at all times.

<https://www.arrt.org/pdfs/governing-documents/standards-of-ethics.pdf>

The new HIPAA regulations regarding confidentiality are in effect and must be followed by students at all times.

Any breach of HIPAA regulations will result in immediate dismissal from the program.

CERTIFYING AGENCIES

ARRT (American Registry of Radiologic Technologists)



AGREEMENT TO ADHERE TO THE CT TECHNOLOGY POLICIES AND PROCEDURES

Acceptance of these policies and procedures is assumed with registration. The school reserves the right to change these regulations when, in its judgment, changes are in the best interest of the students and the program. Students will receive written notification of any addenda or changes to these policies and procedures.

STUDENT RECORDS

All student records are maintained permanently by the program director and sponsoring institution. All records shall be kept in the program director's office in paper form in a locked file cabinet for a period of not less than 7 years. Records older than seven years may be scanned in their entirety and stored digitally on secure hospital network drives. Any student who would like to have the faculty provide verbal or written recommendations must provide written and signed permission releasing their records to be used when developing the recommendation.

POLICY ON ILLEGAL DRUGS

Students, faculty members, administrators, and other employees of the UNC Hospitals are responsible, as citizens, for knowing about and complying with the provisions of North Carolina law that make it a crime to possess, sell, deliver, or manufacture those drugs designated collectively as "controlled substances" in Article 5 of Chapter 90 of the North Carolina General Statutes. Any member of the hospital community who violates that law is subject to both prosecution and punishment by the civil authorities and to disciplinary proceedings by UNC Hospitals. Disciplinary proceedings against a student, faculty member, administrator, or other employee will be initiated when the alleged conduct is deemed to affect the interests of the hospital.



Penalties will be imposed for violation of the policies of UNC Hospitals only in accordance with procedural safeguards applicable to disciplinary actions against students, faculty members, administrators, and employees. The penalties that may be imposed range from written warnings with probationary status to expulsions from enrollment and discharges from employment. Every student, faculty member, administrator, and employee of the hospital is responsible for being familiar with and complying with the terms of the policy on illegal drugs adopted by the Board of Trustees. Copies of the full text of that policy are available on the intranet via Policy Stat.

CLASS / CLINIC SCHEDULES AND ATTENDANCE

The attendance policy for the program requires each student to attend 90.0% of the total number of hours for each class per semester or session. Any unexcused absence or tardiness must be reported to the Program Director as soon as possible and before a clinical shift starts. Arrangements for contacting the Program Director or instructor for a particular class will be discussed at the beginning of each class. Any absences that would exceed the 90.0% rule must have written approval from the Program Director or the Instructor for the particular class.

Tardiness is a poor reflection on the student. It is important to be present on time for class and clinical. Three tardies will be tolerated per class per semester or session, not to exceed thirty minutes. The fourth tardy will result in a verbal warning, the fifth a written warning, and the sixth will result in dismissal from the program. If you arrive more than thirty minutes late for a class or clinical rotation, you will be considered absent.



CLINICAL EVALUATIONS

Clinical evaluations will be made at the end of each rotation by the technologist to whom the student is assigned in the clinic and by the Program Director.

APPAREAL AND APPEARANCE

Appropriate good taste, fashion, good grooming, safety, and consideration for others should govern the appearance of all employees and students, regardless of the type of clothing their jobs require. Attractiveness, neatness, and cleanliness are evidence of concern for our patients, their families, the public, and each other.

1. Comfortable shoes should be worn. Athletic shoes are acceptable. Shoes should be all or mostly black, have a leather toe section, and have a non-scuffing bottom. Most tennis and running shoes are acceptable as long as the main or primary color is black.
2. Open styled sandals are not allowed for safety reasons.
3. Do not wear any kind of denim.
4. Wear nametags (name displayed) and dosimetry badges at all times (Changed out at the beginning of each month). Nametag and dosimetry badge must be worn above the xiphoid process.
5. Always strive to look your best, while at the same time maintaining utmost comfort.
6. Facial jewelry and tongue piercings must be removed prior to entering the clinical area, and no more than two earrings per ear shall be worn; earrings should be small enough that a patient could not grab them and put the student at risk.
7. Lanyards and long neck chains shall not be worn in the clinical area.
8. Hair shall be tied back and not allowed to fall down into the face.



HONOR CODE

Lying, cheating, and stealing are the three major classifications of Honor Code violations. Any violation of the Honor Code may result in dismissal from the program. Be Honest.

TELEPHONE ETIQUETTE

Personality can be reflected over the telephone as easily as in face-to-face conversations. Correct telephone habits aid in making good impressions for the nuclear section. Calls should be answered promptly before the third ring. Identify the area as "Computed Tomography, Ms. Smith speaking. May I help you?" Don't leave the callers hanging on the telephone for a long period of time; offer to take a message. If holding is unavoidable, tell the caller to wait just a minute longer.

A message should be taken for calls from employees who are not in the area. The telephone message should include:

1. Name of caller
2. Business affiliation of caller
3. Telephone number of the caller
4. Date and time of call
5. All pertinent information so that the person for whom the call was intended will know what action to take or what to expect when returning the call.
6. Your initials on the message



SAFETY RULES AND REGULATIONS

It is up to each individual person involved to keep the area in which he/she work safe for themselves as well as his/her patient. Observing safe practices daily and reporting unsafe situations to supervisory personnel can be easily done.

The following safety rules and regulations are intended to assist nuclear personnel in performing their divisional responsibilities in the safest and most productive manner.

PATIENT SAFETY

1. The patient being imaged. All instrumentation should be in proper working order. Quality control and electrical checks should be performed before imaging procedures each day. Cameras should be operating, checked for correct collimation, movement, etc. Radiation-producing and measuring instruments should be monitored and calibrated accurately.
2. Between Studies and when the patient must wait. Side rails must be up on the patient's stretcher. Use seat belts for patients being transported in wheelchairs.
3. Patient Identification: Always check the patient's wristband or medical identification card for the correct name and medical record number before starting intravenous lines or injecting radiopharmaceuticals. All patients must be identified by two methods, such as date of birth, name, medical record number, etc. Refer to LMS for specific training.
4. Insertion of Intravenous Catheters: Students may only start intravenous lines under the DIRECT supervision of a nuclear medicine technologist or physician until they have been deemed competent by the nuclear medicine technology program director. At this



point, the student is allowed to start an intravenous catheter without direct supervision. However, at **no point** during the program is the student allowed to inject any medication or radiopharmaceutical (other than normal saline) without DIRECT supervision by a nuclear medicine technologist or physician.

5. Infants. Infants are to be watched at all times - do not leave an infant or a small child unattended under any circumstances. One can expect an infant or child to present injection problems, so arrange for nursing to start an intravenous line prior to performing the procedure if necessary.

6. Intensive Care Patients. A nurse or physician must accompany the intensive care patient. Know the history and condition of the patient, whenever possible. These patients require special attention, so have instrumentation, pharmaceuticals, and scanning area ready when the patient arrives, to decrease the time the patient is in the department. Place the emergency medical cart in the area if the patient's condition becomes critical. Have oxygen, blood pressure cuffs, and tongue blades available upon request.

PERSONNEL SAFETY

1. Radiation workers should wear dosimetry badges at all times.
2. Wear gloves, masks, and gowns when handling patients in contact isolation. (No students are allowed to assist in any airborne cases)
3. Wash hands before and after contact with each patient and frequently during the day.
4. Perform quality control checks and calibrations to verify equipment is in a safe operating condition. When moving patients from bed to stretcher or vice versa, use a draw sheet to eliminate injury to yourself and the patient, and always get help.
5. When helping patients from a wheelchair, lock the wheelchair and spread your feet slightly to help maintain your balance when shifting or moving the patient.



6. Follow Standard Blood and Body Fluid Precautions at all times.
7. Students must review and initial dosimetry reports as they are posted each month.

PHYSICAL REQUIREMENTS

1. The physical activity of this position requires the student to be able to: climb, push, talk, stand, hear, walk, reach, grasp, kneel, feel, balance, pull, stoop, lift, use fingers, crawl, crouch, and perform repetitive motion.
2. The physical requirements of this position require the student to be able to perform heavy work involving the exertion of up to 100 lbs. of force occasionally and/or 50 lbs. of force frequently.
3. The visual requirements, including color, depth perception, and field of vision are that the student's visual acuity is required to determine the accuracy, neatness, and thoroughness of the work assigned (i.e., custodial, food services, general labor, etc.) or to make general observations of facilities or structures (i.e., security guard, inspection, etc.).
4. The conditions to which the student will be subject in this position include, but are not limited to:
 - a. Inside environmental conditions: protection from weather conditions, but not necessarily from temperature changes.
 - b. Hazards: includes physical conditions such as proximity to moving parts, moving vehicles, electrical current, working in scaffolding or high places, exposure to high heat, or exposure to chemicals.
 - c. He or she may be exposed to infectious diseases.
 - d. He or she will have to interact with prisoners and mental health patients.



HEALTH PROGRAM

The Computed Tomography Student is required to provide his/her own health insurance throughout the entire program. Proof of personal health insurance coverage will be required.

All immunization records should be forwarded to the Program Director at the time of Orientation.

HEALTH STATUS

A student must report to the Program Director any serious illness or injury that affects the student's ability to perform classwork or clinical rotations.

In the instance of serious illness or injury, permission to continue in the program is contingent upon: (a) a written statement from a qualified physician confirming the student's ability to continue clinical and didactic studies. Such a statement may be required as often as may be deemed appropriate and reasonable by the Program Director and (b) in the judgment of the clinical education responsibilities without hazard to patients, self, and others. The student may not miss more time than can reasonably be made up during the same program year in which they were enrolled.

All UNCH CT students will be required to have proof that they have health insurance coverage.



ACCIDENTS OR INJURIES DURING CLINICAL ASSIGNMENTS

All accidents, injuries, or hazardous incidents in which the student is personally involved **must** be reported as soon as possible to the Program Director.

If the incident involves the student and a patient, the supervising technologist must complete a formal incident report.

If the incident involves injury directly to the student, the student should seek immediate care from the acute facility of their choice. The student will be responsible for all charges involved and related to the incident. This includes needle sticks and any other clinic exposure-related health problems.

GUIDANCE AND COUNSELING

Students are encouraged to come to the program director with any academic, personal, or professional problems they feel need discussing. The program director has an "open door" policy, and students needing counseling services do not need an appointment. While the program director is in the hospital, he can be reached via "vocera" or pager if he is not in the office or clinic. All sessions with the program director are confidential.



COMPUTED TOMOGRAPHY PREGNANT STUDENT POLICY

Any student who wishes to declare her pregnancy must do so in writing to the Program Director. At that point, the Director will follow the "Pregnant Employee-Conceptus Dose" policy found in the hospital's radiation safety manual. Throughout the document, Employee should be replaced by student and supervisor by Program Director. If any student has questions regarding the policy, she should direct them to the Program Director. However, prior to program completion and graduation, all clinical education requirements must be met.

TRANSPORTATION AND PARKING

Parking is a constant problem at the hospital and may inconvenience you on occasion. The town of Chapel Hill has a bus service, running scheduled routes to and from the hospital at no expense to the student.

HOUSING

It is the personal responsibility of each student to provide his/her own housing.



I have read and agree to abide by the policies and procedures outlined in the 2025 – 2026 School of Computed Tomography Student Handbook. I understand my right to appeal any grade, dismissal, or other action related to these policies. I also understand my appeal must be received by the Program Director within ten calendar days of my notification. This contract also allows for the use of your class photo on our program's website.

Print: _____ Sign: _____ Date: _____