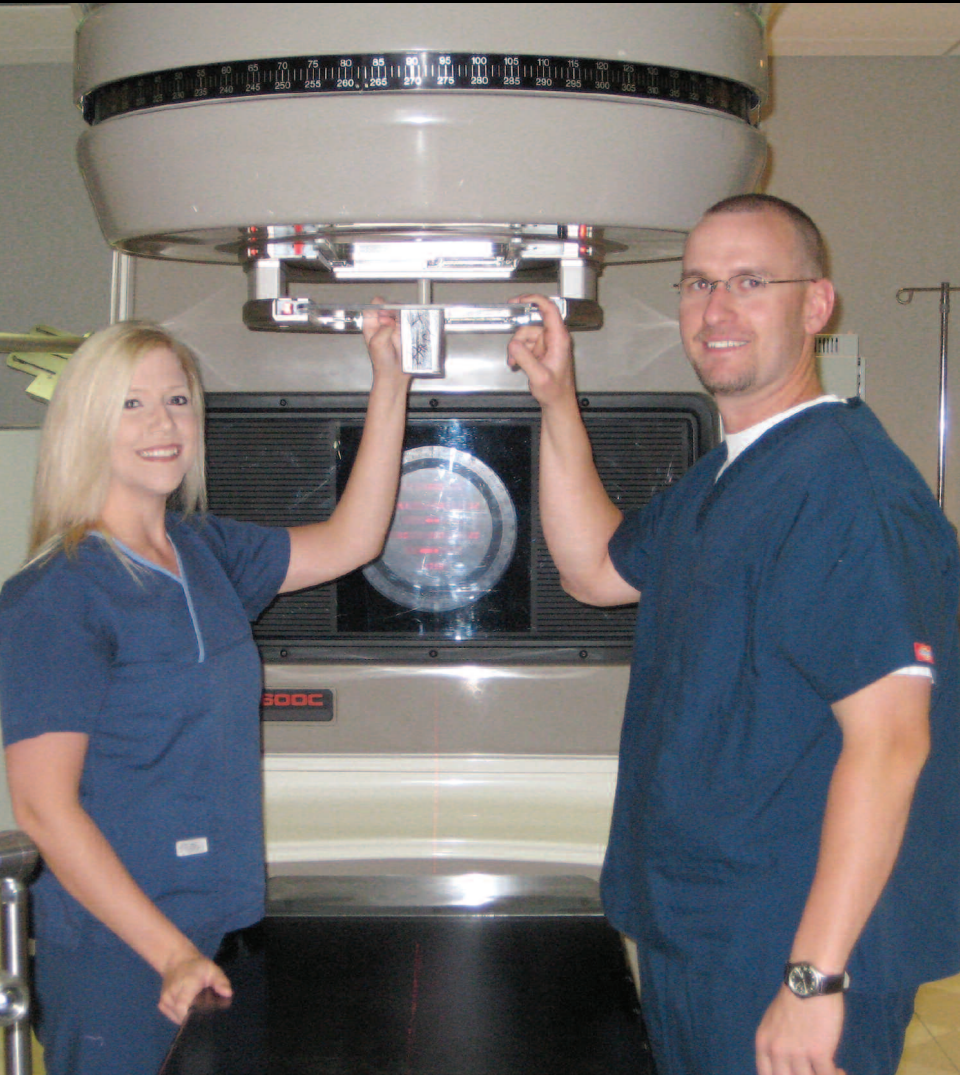


Chattanooga State



Radiation Therapy
Technology

Your Guide

Radiation Therapy Technology

Important information: Radiation Therapy Technology Program at Chattanooga State

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Location:
Radiation Therapy Technology Program
Health Fitness Center (HPF) Building
4501 Amnicola Hwy
Chattanooga, TN 37406

Division Office:
HSC Room 2088

Phone:
(423) 697-4450 • Fax: (423) 493-8771

*All forms and important information can be found on these two Web sites:
N/AH Web site: http://www.chattanoogaastate.edu/allied_health
RTT Web site: http://www.chattanoogaastate.edu/allied_health/radiation_therapy*

Definition/Mission/Goals

Radiation therapy is the use of radiation (x-rays, gamma rays, electron beams, etc.) in the treatment of human diseases, especially cancer. Radiation therapy may be used alone or in combination with surgery and/or chemotherapy.

Radiation therapy is a leading modality in the treatment of cancer patients by offering a cure in some cases and a relief of symptoms in many others. Rapid growth in the field of radiation therapy has created an urgent need for registered radiation therapists.

The mission of the Radiation Therapy program at Chattanooga State Community College is to prepare competent, compassionate and dedicated radiation therapists who will respond ethically and professionally to the needs of patients.

Program Goals

1. Prepare graduates to possess the knowledge, skill, and affect to meet the demands of an entry-level position in radiation therapy technology by ensuring that graduates:
 - (a) demonstrate clinical competence appropriate for an entry-level radiation therapist;
 - (b) demonstrate satisfactory oral and written communication skills;
 - (c) demonstrate satisfactory critical thinking/problem solving skills; and
 - (d) demonstrate an understanding of the importance of professional development and lifelong learning.
2. Provide the regional medical community with qualified individuals who can function as competent entry-level radiation therapists by ensuring that graduates:
 - (a) complete the program in a timely manner;
 - (b) pass the American Registry of Radiologic Technologists certification examination;

- (c) receive jobs upon graduation;
- (d) are satisfied with the education they received from the program; and
- (e) meet the expectations of employers.

Program Content

Summary of Required Hours

The Radiation Therapy Technology Program minimum grade of “75%” is required for all courses in the “Summary of Required Hours.”

Semester Hours

Course No.	Course Title	FALL	SPR	SU
HS 123	Introduction to Radiation Oncology	3		
HS 172	Anatomy and Imaging	2		
HS 223, 233	Radiation Oncology I, II		3	3
HS 220	Clinic I	8*		
HS 214, 224	Radiation Physics I, II	4	4	
HS 230	Clinic II		4*	
HS 243	Radiation Biology and Hyperthermia			3
HS 240	Clinic III			6*
		17	11	12

Total Hours: 40

* *Advanced-standing students are allowed to receive credit by challenging the clinical portion of the program.*

Courses of Study

- Basic Clinical Dosimetry
- Clinical Oncology (study of tumors)
- Human Structure and Function
- Introduction to Computers
- Medical Ethics and Law
- Methods of Patient Care
- Medical Terminology
- Radiobiology (to include hyperthermia)
- Radiation Physics (to include Quality Assurance)
- Radiographic Imaging
- Technical Radiation Oncology (study of tumor treatments)

The courses are taught by radiation therapists, radiation oncologists, radiation physicists, dosimetrists, oncology nurses and others qualified to teach the designated subjects.

Work Settings/Salary Range

With experience, the career of a radiation therapist may go in various directions.

Options: Administration, Education, Dosimetry, Research.

Settings: Hospital, Clinic, Private Office, Industrial Laboratories, Veterinary Medicine, Research, Commercial Sales.

Radiation therapists employed on a full-time basis usually work a 40-hour week. Salary and benefits vary with experience and employment location, but are generally competitive with other allied health specialties. Employment opportunities are available throughout the country, but may vary geographically.

Accreditation and Registry

The Radiation Therapy Technology program at Chattanooga State is accredited by the Joint Review Committee on Education in Radiologic Technology (JRCERT), 20 N. Wacker Drive, Suite 2850; Chicago, IL 60606-3182; Phone (312) 704-5300. Upon completion of the program, the graduate is eligible for certification by the American Registry of Radiologic Technologists (ARRT). If the applicant is successful in passing the exam, he or she becomes a Registered Radiation Therapist RT(T).

- Atlanta Medical Center, 315 Boulevard NE, Atlanta, GA 30312
- Atlanta Oncology Assoc., 7820 Roswell Road, Atlanta, GA 30350
- Baptist Hospital, 2000 Church Street, Nashville, TN 37236
- Blount Memorial Hospital, 907 East Lamar Alexander Parkway, Maryville, TN 37804
- Bristol Regional Medical Center, 1 Medical Park Boulevard, Bristol, TN 37620
- CCC-Andrews Office, 200 Andrews Street, Greenville, SC 29601
- CCC-Eastside Office, 65 International Drive, Greenville, SC 29615
- CCC-Seneca Office, 131 Lila Doyle Drive, Seneca, SC 29672
- Central Georgia Radiation Oncology Center, 770 Pine Street Suite L-20, Macon, GA 31201
- Clearview Cancer Institute, 3601 CCI Drive, Huntsville, AL 35805
- Cleveland Cancer Center, 2620 Peerless Road NW, Cleveland, TN 37312
- Cookeville Regional Cancer Center, 142 West Fifth Street, Cookeville, TN 38501
- Cumberland Medical Center, 421 South Main Street, Crossville, TN 38555
- East Alabama Cancer Center, 2000 Pepperell Parkway, Opelika, AL 36801
- Erlanger Medical Center, 975 East 3rd Street, Chattanooga, TN 37403
- Hamilton Medical Center Judd Cancer Center, P. O. Box 1168, Dalton, GA 30722
- Holston Valley Hospital, West Ravine, Kingsport, TN 37662
- Huntsville Hospital, 101 Sivley Road, Huntsville, AL 35801
- Jackson-Madison General Hospital, 708 West Forrest Avenue, Jackson, TN 38301
- Johnson City Medical Center, 400 State of Franklin Road, Johnson City, TN 37604
- Lake Cumberland Cancer Center, 112 Tradepark Drive, Somerset, KY 42503
- Mahr Cancer Center, 900 Hospital Drive, Madisonville, KY 42431
- Medical Center at Bowling Green, 250 Park Street, P. O. Box 90010, Bowling Green, KY 42102
- Memorial Hospital, 2525 deSales Avenue, Chattanooga, TN 37404
- Memorial Mission (St. Joseph Health System), 509 Biltmore Avenue, Asheville, NC 28801
- Methodist Regional Cancer Center, 102 Vermont Avenue, Oak Ridge, TN 37830
- Middle TN Medical Center Regional Cancer Center, 400 North Highland Avenue, Murfreesboro, TN 37130
- Montgomery Cancer Center, 4145 Carmichael Road, Montgomery, AL 36106
- Northeast Georgia medical Center, 743 Spring St. Gainesville, GA 30505

- Northside Hospital, 1000 Johnson Ferry Road NE, Atlanta, GA 30042
- Piedmont Hospital, 1968 Peachtree Road NW, Atlanta, GA 30309
- Summit Medical Center, 5655 Frist Boulevard, Hermitage, TN 37076
- Thompson Cancer Survival Center, 1915 White Avenue, Knoxville, TN 37916
- UT Medical Center, 1924 Alcoa Highway, Knoxville, TN 37920

Application

The Radiation Therapy Technology program is a twelve month certificate program that begins in the fall. It is designed to provide specialty education for registered radiologic technologists (or registry-eligible technologists) and prepares them to take the ARRT certification examination in radiation therapy technology. Classes are conducted on Thursdays and Fridays of alternating weeks.

Radiologic technologists who have worked in radiation therapy technology for a minimum of two years and can document their employment may apply for the advanced-standing course of study. Advanced-standing students must complete clinical courses by challenging the course clinical competencies.

Prerequisites

1. Graduate from an accredited program in Radiologic Technology and be ARRT- (American Registry of Radiologic Technologists) registry-eligible,* or
2. Be a current ARRT Registered Radiologic Technologist, or
3. Have completed all course work in the Pre-Radiation Therapy Curriculum at Middle Tennessee State University (MTSU).

** Note: Registry-eligible applicants must successfully complete the ARRT exam in radiologic technology before completing the Radiation Therapy Technology program.*

Application Procedures

1. Complete Chattanooga State application form.
2. Complete Nursing and Allied Health Division application form.
3. Submit high school transcripts.
4. Submit any post-secondary transcripts.
5. Submit college and Radiologic Technology program transcripts.
6. Submit ARRT score report (or provide scheduled test date).
7. Document minimal 24 hours of clinical observation.
8. Submit observation evaluation form.
9. Submit three reference forms (must use program provided forms).

MTSU Pre-Radiation Therapy Requirements

While MTSU Pre-Radiation Therapy applicants are exempt from steps 5 and 6, they must, however, complete a certified nursing assistant (CNA) program in order to document patient care experience.

Program application, transcripts and forms must be submitted to the:

Radiation Therapy Technology Program
 Chattanooga State Technical Community College
 4501 Amnicola Highway
 Chattanooga, TN 37406

Application Deadlines

All required materials must be submitted to the Radiation Therapy Technology program by the middle of April for priority consideration for fall admission. Applications received after the deadline will be reviewed if space permits.

Applicants who have completed and submitted their admission materials by the application deadline will have their materials reviewed and personal interviews will be scheduled with qualified applicants. Each applicant is evaluated on the basis of his or her previous high school record, college and radiologic technology program achievement, the score from the American Registry of Radiologic Technology exam (AART) and a personal interview designed to determine the level of the applicant's skill in communication and problem solving, relevant work experience and true desire to become a radiation therapist.

Traditional Student Admission Requirements

1. Graduate from an accredited or equivalent program in radiologic technology and be ARRT registered or be registry eligible.
2. Provide all academic transcripts (including high school, all post-secondary institution, and radiologic program transcripts) to the Radiation Therapy Technology program director.
3. Submit a completed application to Chattanooga State.
4. Submit a completed Division of Nursing/Allied Health Application to the Radiation Therapy Technology program director.
5. Document at least 24 hours of clinical observation at an approved cancer treatment facility and submit observation evaluation forms.
6. Submit three references forms.
7. Interview with program director and Radiation Therapy selection committee.

Advanced-Standing Student Admission Requirements

In addition to meeting all of the requirements listed for traditional student admission the following criteria must also be met:

1. Documentation of a minimum of two years experience employed full time as a technologist in radiation therapy. This documentation must verify experience within all clinical aspects of radiation oncology.
2. Continued employment in radiation therapy during the program year.

Selection

Selection of applicants for the program is based upon recommendation for acceptance by the Radiation Therapy Technology program Selection Committee. Composition of the class will reflect diversity based on age, gender and race.

Applicants who are accepted into the program will be notified by mid June. Final acceptance into the Radiation Therapy Technology program is contingent upon the results of a physical examination and a drug screen. CPR certification must also be documented.

The goal of all Chattanooga State's health programs is to prepare practitioners who can function in the health care arena to ensure the safety of patients. Program standards are in place to assure that students have the potential to perform as entry-level practitioners. These program standards are available in the Nursing and Allied Health Division office. Acceptance into a health program is contingent upon the student's demonstrated ability to meet these standards.

Continuation Policy

1. Registry-eligible students must successfully complete the ARRT examination in radiologic technology before the end of the fall semester. Those students who do not pass the ARRT examination in radiologic technology prior to the end of the fall semester will not be allowed to enroll in the spring semester.
2. A minimum grade average of 75% is required in **each** radiation therapy technology didactic course.
3. A minimum grade average of 75% is required in **each** radiation therapy technology clinical course.

Length of Training

The Radiation Therapy Technology program at Chattanooga State Community College is a 12-month program and begins with the fall semester. Full-time student status is required.

Job Duties and Qualifications

The radiation therapist is responsible for administering a course of radiation treatment as prescribed by a radiation oncologist, a physician specialized in radiation therapy.

As a key member of the treatment team, the therapist must be familiar with every aspect of the radiation therapy equipment and must exercise constant care and accuracy in applying the techniques used in giving radiation treatment to patients.

A good therapist also must show patience, understanding, empathy and compassion for the patient when carrying out the radiation oncologist's instructions.

Philosophy of Operation

The philosophy of the Radiation Therapy Technology program is that a unified instructional program offers the student the best opportunity for success. The course sequence has been planned with a consideration for the step-by-step development of the student and the integration of didactic course work with clinical experience. The curriculum has been designed to be taught over a three-semester period both to provide students a reasonable time for completion of the program and to limit student academic and clinical involvement to no more than 40 hours per week. In addition, the curriculum has been developed to incorporate the content areas required by the radiation therapy technology standards.

Technical training which interacts with basic sciences and interpersonal skills produce a technologist who will be able to function as both a member of society and of his/her profession. We believe that all students must develop a genuine concern for the well-being of people. The faculty encourages the development of non-prejudicial attitudes that will enable the student to recognize the radiation therapy patient as an individual with personal needs.

The faculty strongly believe that the radiation therapy student must be able to work in a cooperative setting with other professionals in order to provide quality health care to the patient. It is felt that this individual must have a strong sense of loyalty both to his/her profession and to his/her patients. He/she should also be encouraged to work continually to improve and advance the standards by which the radiation therapy technology profession is guided.

Student Goals

Upon completion of this program, the student will be able to:

1. Communicate effectively via oral and written means
2. Understand the daily operations of a cancer treatment facility
3. Provide patient care essential to radiation therapy procedures
4. Ensure patient safety and comfort essential to radiation therapy procedures
5. Participate in patient education procedures

6. Observe a patient undergoing radiation therapy and detect the first signs of any complication and determine when treatment should be withheld until a physician may be consulted
7. Simulate and plan a prescribed course of treatment
8. Verify the mathematical accuracy of the prescription
9. Perform accurate monitor unit calculations
10. Construct immobilization and beam-directional devices
11. Deliver a planned course of radiation therapy
12. Maintain daily records and document technical details of the treatment administered
13. Understand the function and utilization of radiation therapy equipment
14. Understand the use of all treatment accessories
15. Know the safe limits of equipment operation, detect equipment malfunctions, and report same to the proper authority
16. Apply the rules and regulations for radiation safety, detect any radiation hazards, and provide for appropriate public safety in the event of a radiation accident
17. Understand the different treatment protocols
18. Assist in the preparation of brachytherapy sources
19. Assist the physician in calibration of equipment, in quality assurance, and in treatment planning procedures

Technical Standards

(Major Tasks of Job Performance and Clinical Education)

1. Communicate with patients and others in completion of treatment and simulation procedures.
2. Retrieve and dispatch patients within the department.
3. Provide for the patient's physical safety and well being while he/she is under the radiation therapist's care.
4. Provide basic life support services when directed.
5. Assist with patient movement and perform direct positioning for treatment and simulation procedures.
6. Manipulate and operate simulation equipment and adjunct instrumentation for patient treatment equipment and adjunct instrumentation for patient treatment.
7. Manipulate and operate treatment equipment and adjunct instrumentation for patient treatment.
8. Prepare and use procedural materials, such as instruments, linens and patient care items.
9. Retrieve, secure for filming and dispatch simulation and treatment film holders and recording mechanisms during the process of obtaining port verification and simulation films.
10. Process and/or retrieve film products.
11. Work with various therapeutic and simulation equipment utilized by the facility.
12. Perform basic equipment testing and maintenance on therapeutic and simulation equipment.
13. Receive and schedule patients, file and assist with office and clerical work.
14. Perform radiation therapy tasks for an eight-hour assignment for a full-time curriculum.

15. Prepare accessory devices (alloy block, tissue compensator, etc.) for use in patient treatment procedures.
16. Perform monitor unit/time calculations and other specific math functions used for individual patient treatments.
17. Prepare and maintain accurate records of treatment procedures administered.
18. Prepare and maintain accurate records of simulation procedures performed.
19. Apply departmental and nationally recognized rules and regulations for radiation safety.
20. Prepare and utilize immobilization devices for simulation and treatment procedures.
21. Recognize patients' clinical progress and complications, and demonstrate knowledge of when to consult the physician.

An applicant or student who is considered to be unable to meet the minimum technical standards necessary for job performance must demonstrate compliance with the standards in order to be considered for admittance/continuance in the program.

Americans With Disabilities

Students who have educational, psychological, and/or physical disabilities may be eligible for accommodations that provide equal access to educational programs and activities at Chattanooga State. These students should notify the instructor immediately, and ideally should contact Disabilities Support Services (S-113, phone 423-697-4452) within the first two weeks of the semester in order to discuss individual needs. The student must provide documentation of the disability so that reasonable accommodations can be requested in a timely manner. All students are expected to fulfill essential course requirements in order to receive a passing grade in a class, with or without reasonable accommodations.

If a student has a disability which may require assistance or accommodations or wishes to file a complaint regarding ADA compliance, he/she should contact Disabilities Support Services.

Criminal Background Checks

Following acceptance and prior to entering the first career course in designated health care programs, each student must undergo a criminal background check, in order to comply with policies of affiliating clinical practice agencies. It shall be the student's responsibility to comply with instructions provided upon acceptance and provide the results by a designated date. The check will be at the expense of the student. Students who do not meet this requirement in a timely manner or whose background does not meet agency standards will not be able to successfully complete the program.

Additionally, a criminal background may preclude licensure or employment. Individuals with a question concerning this should schedule an appointment with the program director.

Admission Checklist

Utilize the checklist below as a guide for completing your application requirements. All application materials must be postmarked by middle of April for priority consideration.

Have you fulfilled the admissions requirements for Chattanooga State?

- Complete an application and submit application fee.
- Provide official transcripts to the Admissions Office and request evaluation for transfer credit.

Note—It is the applicant's responsibility to verify with the Admissions Office the receipt of any transcript and to request evaluation of transfer credits by the Admissions Office.

Have you fulfilled the admission requirements for the Radiation Therapy Technology Program?

- Complete and submit the Allied Health application and documentation to:
Radiation Therapy Technology Program, Lisa Legg
4501 Amnicola Highway, Chattanooga, TN 37406
Application form is available on the Web site at www.chattanoogaogastate.edu/allied_health. It is also available at the main campus HSC-2088 (second floor) or call (423) 697-4450.
- Submit all high school/GED and college transcripts.
 - Verify with the Radiation Therapy program director the receipt of all transcripts.
- Submit proof of ARRT registration (score or test date).
- Submit completed Clinical Observation Form with Evaluation Form.
- Submit three reference forms.
- If you are interested in the advanced-standing program, please include the following:
 - Documentation of a minimum of two years employment as a Radiation Therapist, and documentation of current employment in radiation therapy. This documentation must be submitted by the personnel department of your facility.

Hotel Accommodations

You may wish to look online at www.travelocity.com for hotel rates. Presently, the closest hotels to the campus are: Holiday Inn Express, Hixson, TN, (423) 877-8388 and Hampton Inn in Hixson, Tn, (423) 877-3100. Though Chattanooga State has no contracts with area hotels for special rates, traditionally, when our students explain that they will be staying on a consistent basis throughout the year, promotional rates have been provided.

Financial Aid Notes

Students wishing to receive financial aid should pay special attention to the satisfactory academic progress regulations regarding maximum time frame. This policy states, “A student may **attempt** up to **102 credit hours**, plus up to 30 transitional studies hours, before he/she becomes ineligible for financial aid. ***The time frame for students seeking a SECOND associate degree is also determined by the 102 credit hour limit plus transitional studies credit hours. Credit hours from the FIRST degree WILL be counted toward the second degree program.***”

Please see your advisor if you have questions regarding the number of credit hours you have attempted. If you need further clarification regarding the satisfactory academic progress policy for financial aid, please see someone in the Financial Aid Office.

If you are interested in any form of financial aid, your first step should be to visit www.fafsa.ed.gov. On the application, you will designate Chattanooga State Community College as your school. You may get in touch with the Financial Aid Office at (423) 697-4402. You may also find other scholarship opportunities at www.fastweb.com. Remember, if you are applying for **any** type of financial aid and/or any scholarships, you must first complete the FAFSA form and receive the corresponding **SAR** report.

Radiation Therapy Technology Program Costs 2009-2010

These are estimated program costs and are subject to change.

This list does not include lodging and other expenses incurred during class meetings.

Students are responsible for the costs of uniforms/lab coats for clinic.

College fees are included in the maintenance cost.

*Link to Chattanooga State current fees on the Web site -
<http://www.chattanoogaastate.edu/bursar>*

	In-State	Out-of-State
Pre-Admission		
College Application (one time application fee)	\$ 15.00	\$ 15.00
First Semester (fall) (17 hours)		
In-state maintenance fee/Out of state tuition fee	1,507.50	5,785.50
Physical Examination/Health Requirements	300.00	300.00
Malpractice Insurance	149.00	149.00
Textbooks	400.00	400.00
Radiation Monitoring	31.50	31.50
Second Semester (spring) (11 hours)		
In-state maintenance fee/Out-of-state tuition fee	1,364.00	5,203.00
Textbooks	150.00	150.00
Third Semester (summer) (12 hours)		
In-state maintenance fee/Out-of-state tuition fee	1,477.50	5,665.50
Textbooks	100.00	100.00
ARRT Exam Registration	150.00	150.00

A National Leader in Technology



Nursing/Allied Health

Radiation Therapy Technology

4501 Amnicola Hwy.

Chattanooga, TN 37406-1097

www.chattanoogaestate.edu

423-697-4450

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