

# COMPUTED TOMOGRAPHY: CS

Certificate of Specialization | 18 credit hours minimum

Area of Interest: Health Professions

Academic Advising (<https://stlcc.edu/admissions/advising/>)

## Program Description:

The Computed Tomography (CT) Certificate of Specialization is designed for graduates of an associate degree radiologic science program and registered Radiologic Technologist, Radiation Therapist, or Nuclear Medicine Technologist entering the field of Computed Tomography (CT). The Computed Tomography certificate provides the student with the required course work and clinical practice to perform as a Computer Tomography Technologist in medical imaging departments of hospitals, medical centers, and free-standing medical imaging facilities. Upon successful completion of the program, students are eligible to take the American Registry of Radiologic Technologists (ARRT) Computed Tomography certification examination.

Pre-requisites for CT certificate program: Must be a registered Radiologic Technologist with ARRT RT(R), a Nuclear Medicine Technologist with NMTCB (CNMT) or ARRT RT(N), or a Radiation Therapist with ARRT RT(T) credentials. Additional student expenses include criminal background check, 5 panel drug screen, physical exam and immunization record or titers, PPD and current American Heart Association Basic Life Support for Healthcare Providers (CPR card).

**Locations.** This program is offered in its entirety at Forest Park.

**Cost of Attendance.** For more information on cost of attendance visit MoSCORES (<https://scorecard.mo.gov/Search/>).

**Program Career and Salary Information.** Pursuant to Missouri HB 1606 (2018), information regarding the number of credit hours, program length, employment rate, wage data, and graduates employed in careers related to their program of study at St. Louis Community College can be found at the following URL: [https://scorecard.mo.gov/scorecard/\(https://www.google.com/url?q=https://scorecard.mo.gov/scorecard/&sa=D&ust=1555536894857000&usg=AFQjCNG1xf3E\\_i2lO96zEytILO-s5xaJCQ\)](https://scorecard.mo.gov/scorecard/(https://www.google.com/url?q=https://scorecard.mo.gov/scorecard/&sa=D&ust=1555536894857000&usg=AFQjCNG1xf3E_i2lO96zEytILO-s5xaJCQ)). Search using School / Program “St. Louis Community College” and choose the degree or credential type of interest.

The following limitations to the data apply: Information provided is based on the most recent cohorts available. Typically, most recent cohorts for wage and completion data are six years prior to the current academic year. Time to complete a program of study varies depending on the number of credit hours students earn per semester.

**Interested in this program?** Start the enrollment process by visiting the Apply to STLCC (<https://www.stlcc.edu/admissions/apply-to-stlcc/>) page.

## At the completion of the program, students are expected to:

1. correlate technical factor manipulation effect on image quality in CT imaging.
2. evaluate routine imaging and phase of contrast in addition to therapeutic procedures, virtual colonoscopy, and radiation therapy planning.
3. apply basic anatomy and physiology of the human body as it relates to CT imaging.
4. apply radiation safety techniques during imaging for all persons involved in clinical examinations.
5. paraphrase specifics of the different methods of data acquisition, image formation, evaluation, and archival process in CT.
6. identify the limitations and risks associated with CT, including radiation exposure, and image artifact identification.
7. identify components and history of the CT unit and the accessory equipment involved.
8. outline contrast agents based upon chemical makeup and the possible side effects.
9. perform CT imaging procedures specific to the head, neck, chest, spine, abdomen, pelvis, and musculoskeletal system.

Code	Title	Credit Hours
<b>Program Requirements</b>		
CT 101	Cross-Sectional Anatomy for Computed Tomography	3
CT 102	Principles and Patient Care in Computed Tomography	3
CT 103	Clinical Practicum I for Computed Tomography	3
CT 104	Physics and Instrumentation in Computed Tomography	3
CT 201	Radiation Safety and Quality Management in Computed Tomography	2
CT 202	Clinical Practicum II for Computed Tomography	3
CT 203	Registry Review for Computed Tomography	1
<b>Total Credit Hours</b>		<b>18</b>

## Full-Time Academic Plan

**PLEASE NOTE:** If you originally enrolled at STLCC prior to Fall 2024, you may need to view an archived catalog (<https://www.stlcc.edu/programs-academics/course-catalog/>) for your correct program requirements. Please speak with an advisor or the program coordinator for more information.

Code	Title	Hours	Prerequisites	Milestones/Notes
<b>First Year</b>				
<b>Fall</b>				
CT 101	Cross-Sectional Anatomy for Computed Tomography	3	Admission to the Computed Tomography (CT) program and Reading Proficiency	

CT 102	Principles and Patient Care in Computed Tomography	3	Admission to the Computed Tomography (CT) program and Reading Proficiency	
CT 103	Clinical Practicum I for Computed Tomography	3	Admission to the Computed Tomography (CT) program and Reading Proficiency	
	<b>Credit Hours</b>	<b>9</b>		
<b>Spring</b>				
CT 104	Physics and Instrumentation in Computed Tomography	3	Admission to the Computed Tomography (CT) program and Reading Proficiency	
CT 201	Radiation Safety and Quality Management in Computed Tomography	2	CT 101, CT 102, CT 103, and CT 104 with a minimum grade of "C" and Reading Proficiency	
CT 202	Clinical Practicum II for Computed Tomography	3	CT 101, CT 102, CT 103, and CT 104 with a minimum grade of "C" and Reading Proficiency	
	<b>Credit Hours</b>	<b>8</b>		
<b>Summer</b>				
CT 203	Registry Review for Computed Tomography	1	ARRT or NMTCB Registered Technologist and documentation of 720 hours of clinical CT hours or concurrent or prior enrollment in CT 202 with a minimum grade of "C", and Reading Proficiency	
	<b>Credit Hours</b>	<b>1</b>		
	<b>Total Credit Hours</b>	<b>18</b>		