VALENCIA

Computed Tomography
Advanced Technical Certificate

Set Yourself Up for a Great Career

In today's world, computerized imaging is a daily occurrence. Computed tomography (CT) uses X-rays and computers to gather anatomic information from a sectional plane of the body and present it as a three-dimensional image. The field of computed tomography is continuously changing to provide diagnoses of disease processes that cannot be demonstrated by normal radiographic methods. A CT technologist must be able to perform computed tomographic procedures without constant supervision of technical detail. It is important that the technologist have a thorough knowledge of anatomy. Judgments about image formation and archiving and procedure performance have to be made independently and with regard to patient care and safety. This advanced technology uses highly specialized equipment and requires specialized education and training.

Note:
The Computed Tomography program is a selective admission, limited enrollment program. Course content is presented online with the exception of clinical experience.

Potential Careers
· CT Technologist

Potential Earnings
$40,000 – $43,000 per year

Contacts
Health Sciences Career Program Advisor
West Campus: 407-582-1288

For more information, visit our Web site at:
valenciacc.edu/west/health

Typical Tasks May Include...

· Performing specialized computerized tomographic procedures using ionizing radiation scanning equipment

· Administering IV contrast media

· Applying knowledge of patient anatomy to position patient to capture appropriate image

· Protecting patients and self from radiation

· Providing respectful care to patients

Potential Employers
CT technologists are primarily employed in hospitals and diagnostic imaging centers. Opportunities are also available in private physicians' offices, industry, civil service and public health service facilities.

Computed Tomography
Advanced Technical Certificate

Limited-Access

This program is designed for individuals who are currently certified in Radiography (ARRT) or Radiation Therapy (ARRT) or Nuclear Medicine Technology (ARRT or NMTCB). Program content follows the American Society of Radiologic Technologists (ASRT) curriculum to prepare program completers for the American Registry of Radiologic Technologists (ARRT) certification examination in Computed Tomography. Completion of this certificate program does not insure permission to take the credentialing examination. With the exception of the course RTE 2571L, program courses are offered online.

Computed Tomography is a limited-access program. Admission to Valencia does not imply acceptance to the Computed Tomography program. Students must submit an application and be accepted to the program.

Admission requirements for the Advanced Technical Certificate in Computed Tomography are:

· Submit a completed Valencia Application for Admission

· A.S. degree in radiography, nuclear medicine technology, radiation therapy

· Be currently certified in Radiography (ARRT) or Radiation Therapy (ARRT) or Nuclear Medicine Technology (ARRT or NMTCB)

· Submit current proof of CPR certification

· Submit a completed Valencia Computed Tomography application

· Submit proof of employment in the area of certification for one of the above modalities within the past year.

Program Outcomes:
· Perform entry level skills competently as described by the scope of practice for computed tomography.
· Perform effective communication skills within the healthcare environment.
· Provide a safe environment in the healthcare setting.
· Practice professional behaviors in the healthcare setting.
· Execute safe clinical decision making in medical imaging.

	Course	Title	Credits
+*	RTE 2762	Sectional Anatomy	3
+*	RTE 2571	Computed Tomography	3
+*	RTE 2571L	Computed Tomography Clinical Education	3
		Total Certificate Credits	**9**

NOTES:
All accepted applicants are required to submit applications through Valencia for a criminal background check. Applicants for Valencia's Health Sciences programs must be free of offenses that would disqualify them from a student clinical experience in a healthcare setting and must have their civil rights intact. This policy is in response to requirements by clinical agencies and state/federal regulations.

All certificate courses are offered on the West Campus.

Specialized courses may not be offered every session or on every campus.
+   This course must be completed with a grade of C or better.
*   This course has a prerequisite; check description in Valencia catalog.
Code Denotes course attribute if needed for degree audits.

Valencia Community College
Program Guide for the Advanced Technical Certificate
in
Computed Tomography (CT)

ADMISSION CRITERIA and CHECKLIST

The Computed Tomography (CT) Program at Valencia is a limited access program which means that more students want to be in the program than Valencia can serve; however, there is no application deadline and you will be admitted to the program on a first-come, first-served basis if you satisfy all of the admission requirements. The program begins in Fall and Spring Terms. Because the program has limited enrollment, you may not be able to begin the program in the next term that it is offered. Applicants who decline entry for their identified admission term must reapply to the program. **Admission requirements that must be satisfied prior to submitting an application to the CT Program are:**

_____1. Submit a completed Valencia Application for Admission via Valencia's Web site at www.valenciacc.edu/admissions, pay the application fee, and be in Active Student Status.

_____2. Submit documentation of current certification in one of the following:
  - Radiography (ARRT)
  - Radiation Therapy (ARRT)
  - Nuclear Medicine Technology (ARRT) or (NMTCB)

_____3. Send to Valencia's Admissions Office an official transcript that indicates you have earned the minimum of an Associate Degree in Radiography, Nuclear Medicine Technology or Radiation Therapy from a regionally-accredited U.S. college or university.

_____ 4. Submit verification of either graduation, within the year prior to program application, with the minimum of an Associate Degree in Radiography, Nuclear Medicine Technology or Radiation Therapy **OR** employment within the year prior to program application in the area of certification for one of the three modalities. Documentation of employment must be on official letterhead and attached to the program application.

_____5. Submit proof of current CPR Certification. (If you do not have it at the time of application, you may wait until Orientation to learn the specific CPR requirements.)

_____6. Review program information on the Valencia Computed Tomography Web site at www.valenciacc.edu/health and review the Health Sciences Program Guidelines in this Program Guide.

_____7. Submit to a campus Business Office the $15.00 non-refundable Health Sciences program application fee (check or money order payable to Valencia Community College). This fee must be paid with each Health Sciences program application.

_____ 8. When Numbers 1 – 7 are complete, submit a completed Valencia Computed Tomography Program application to the Health Sciences Advising Office on West Campus. If eligible, you will be placed on the acceptance list for the next available space in August or January. The application can be found at www.valenciacc.edu/health .

The estimated total cost for the CT Program, including tuition, special course fees, books, and associated expenses such as the background check and immunizations is $1850.

DIVISION OF HEALTH SCIENCES
PROGRAM GUIDELINES for ALL LIMITED ACCESS PROGRAMS

The Health Sciences Division provides information about specific admission criteria for Health Sciences programs. The Health Sciences Career Program Guides, of which this is one, are developed for a specific academic year (August to July) and, as a rule, changes to admission and program requirements become effective at the start of an academic year; however, **Valencia Community College reserves the right to make changes in admission and program requirements as circumstances require.** If a mid-year change becomes necessary, it will be indicated in the information for the specific program on the Valencia Web site at www.valenciacc.edu/asdegrees/health.

Health Sciences program applications are available at www.valenciacc.edu/health. If a program application deadline falls on Saturday or Sunday, the deadline will become the following Monday.

To submit an application to a Health Sciences program, you must be a U.S. citizen or permanent resident.

A student may apply to a maximum of two limited access Health Sciences programs within a 12-month period; however, enrollment is limited to only one Health Sciences program in a term. A new program application is required if reapplying for admission. Having previously earned a college degree does not grant you an advantage in admission to a Health Sciences program that does not require a degree for admission nor does it exempt you from taking the Test of Essential Academic Skills (TEAS) if the TEAS is required for admission to the program.

All communication from Valencia relative to program admission will be via your Atlas email address. Written communication you initiate with Valencia staff should also be via your Atlas email account and should include your full name and your Valencia ID number.

BACKGROUND CHECK, IMMUNIZATIONS AND CPR CERTIFICATION
All Health Sciences programs require a background check, specific immunizations and American Heart Association Basic Life Support Healthcare Provider certification prior to the start of the program—not prior to submitting the application to the program.

> **Background Check Protocols Include:**
> Students accepted to a Valencia Health Sciences program must be screened by the Florida Department of Law Enforcement for criminal history and must have a Social Security Verification, Residency History, Nationwide Sexual Offense Registry Search, Nationwide Healthcare Fraud/Abuse Scan, and a US Patriot Act/OFC search. A Nationwide Criminal Search will also be required if you have worked, resided or been a student outside Florida during the two-year period prior to the start of the Valencia Health Sciences program.
>
> **If you have a positive background check, you may be denied admission to a Health Sciences program.** If you have concerns regarding your background, you are encouraged to make contact with the Health Sciences Career Program Advisor.

MANDATORY ORIENTATION
The mandatory program Orientation for accepted students usually is held four to six weeks prior to the program start date. If accepted, about two months prior to the start of the program, you will be notified via your Atlas email of the mandatory Orientation program and requirements. The Orientation materials will give you the process required to complete your background check through a specific company, the immunizations and CPR you will need, your uniform requirements (if any) and other pertinent information. Deadlines for completing the tasks required prior to starting the program will also be provided. Failure to meet the deadlines will prevent you from starting the program.

TRANSPORTATION TO CLINICAL SITES
If accepted to a program, you will be responsible for furnishing transportation to the community and/or hospital facilities used by Valencia for clinical practice.

Drug testing is now required of all Valencia Health Sciences program students.

COMPUTED TOMOGRAPHY CURRICULUM

Course	Title	Credits
+* RTE 2762	Sectional Anatomy	3
+* RTE 2571	Computed Tomography	3
+*^RTE 2571L	Computed Tomography Clinical Education	3
	Total Certificate Credits	**9**

+ This course must be completed with a grade of C or better.

+ This course has a prerequisite; check the description in the Valencia catalog.

^ This course provides for clinical rotation to achieve clinical experience in performing and documenting CT procedures toward your compliance with the ARRT eligibility requirements.

Courses are offered such that they can be assimilated into the employed professional's schedule. RTE 2762 and RTE 2571 must be completed before taking RTE 2571L.

If you are currently employed in CT—or work at a facility that would allow you to cross-train in CT—and you are in the process of accumulating the ARRT required competencies, with appropriate documentation, you can satisfy the requirements of RTE 2571L Computed Tomography Clinical Education through Experiential Learning credit. If you choose to apply for Experiential Learning credit, you must submit the required documentation and pay the Experiential Learning fee per credit (rather than regular tuition).

The following courses are offered in Fall Term:

+RTE 2762	Sectional Anatomy	3
+RTE 2571	Computed Tomography	3

The following courses are offered in Spring Term:

+RTE 2762	Sectional Anatomy	3
+RTE 2571	Computed Tomography	3
+RTE 2571L	Computed Tomography Clinical Education	3

The following course is offered in Summer Term:

+RTE 2571L	Computed Tomography Clinical Education	3

CORE PERFORMANCE STANDARDS FOR ADMISSION AND PROGRESSION

INDIVIDUALS WITH A DISABILITY:

For the purpose of the Computed Tomography (CT) Program, a "qualified individual with a disability is one who, with or without reasonable accommodations or modifications, meets the essential eligibility requirements for participation in the program." The Division of Health Sciences at Valencia makes no preadmission inquiries concerning an applicant's disability status. Information related to an applicant's disabilities is not a part of the information reviewed by the Admission Committee.

CT is a practice discipline with cognitive, sensory, affective, and psychomotor performance requirements. Based on these requirements the following list of "Core Performance Standards" has been developed. Each standard has an example of an activity or activities, which a student will be required to perform while enrolled in the CT Program. These standards are a part of each CT course and of the professional role expectation of a CT Technologist.

These Performance Standards should be used to assist students in determining whether accommodations or modifications are necessary for the student to meet program requirements. A student who identifies potential difficulties with meeting the Performance Standards should communicate his/her concerns to an advisor in the Office for Students with Disabilities. The student has the responsibility to identify and document the disability and to request reasonable and appropriate adjustments. Determination is made on an individual basis as to whether any accommodations or modifications can be reasonably made.

(Continued)

PERFORMANCE STANDARDS *continued*

ISSUE	STANDARD	EXAMPLES OF REQUIRED ACTIVITIES (NOT ALL INCLUSIVE)
Critical Thinking	Critical Thinking ability sufficient for safe clinical judgment.	* Identify cause-effect relationships in clinical situations. * Evaluate images to ascertain that they contain proper identification and are of diagnostic value. * Select exposure factors and accessory devices for all procedures with consideration of patient size, age, and extent of disease. * Assess patient's condition and needs from a distance of at least 20 feet. * Initiate proper emergency care protocols, including CPR, based on assessment data.
Interpersonal	Interpersonal abilities sufficient to interact with individuals, families, and groups from a variety of social, emotional, cultural, and intellectual backgrounds.	* Establish rapport with patients, families, and colleagues.
Communication	Communication abilities sufficient for interaction with others in verbal and written form.	* Communicate in English to the patient in order to: converse, instruct the patient, relieve anxiety, gain their cooperation during procedures, understand the patient when communicating symptoms of a medical emergency. * Read the patient's medical chart and/or physician's orders. * Legibly write patient history. * Documents own actions and patient responses as indicated.
Mobility	Physical abilities sufficient to move from room to room and maneuver in small spaces.	* Assist all patients, according to individual needs and abilities, in moving, turning, transferring from transportation devices to the CT couch, etc. * Be able to push, pull, and lift 40 pounds. * Push a stretcher, wheelchair or other transportation device without injury to self, patient, or others.
Motor Skills	Gross and fine motor abilities sufficient to provide safe and effective care.	* Accurately draw up sterile contrast media and other solutions without contaminating the syringe and/or needle, etc. * Physically be able to administer emergency care including performing CPR. * Calibrate and use equipment; position patients/clients
Hearing	Auditory abilities sufficient to monitor and assess patient needs, and to provide a safe environment.	* Hear a patient talk in a normal tone from a distance of 20 feet. * Hear monitor alarm, emergency signals, and cries for help.
Visual	Visual ability sufficient for observation and assessment necessary in the operation of equipment and care of patients.	* Observe the patient in order to assess the patient's condition and/or needs from a distance of, at least, 20 feet. * Can see numbers, letters, calibrations, etc. of varying sizes located on equipment utilized by a CT technologist.
Tactile	Tactile ability sufficient for patient assessment and operation of equipment.	* Perform palpation, tactile assessment, and manipulation of body parts to insure proper body placement and alignment. * Manipulate dials, buttons, and switches.