## Radiologic

## Technology

## Program

PROGRAM INFORMATION AND APPLICATION PROCESS
REVISED JUNE 2022

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## What is a Radiologic Technologist and what do they do in their job?

- Radiologic technologists make up the third-largest group of health care professionals-surpassed in number only by physicians and nurses
- A primary responsibility of technologists is to create images of patients' bodies using specialized equipment. This helps doctors diagnose and treat diseases and injuries.
- Diagnostic imaging uses X-ray, Magnetic Resonance Imaging (MRI), Computed Tomography (CT), fluoroscopy, or sonography equipment.


## What happens in a typical workday for a radiologic technologist?

- Technologists roles include patient safety and care as you complete your daily work, splitting time between technological imaging tasks and patient interactions
- Patient care entails quickly putting patients concerns at ease. Communication and educating patients and their families is a large part of the examination process.
- The job requires standing for the majority of a workday, walking, carrying, pushing, and lifting patients and medical equipment. Technologists need visual and hearing acuity, comprehension of and speaking English to ensure patient safety.


## What are the physical requirements?

- Visual acuity (can be corrected)
> Hearing acuity (can be corrected)
LLift and carry 20 pounds across a room
Lift 50 pounds from floor
- Communicate clearly using spoken and written English.


## What does a Radiologic

 Technologist need to know?- Anatomy \& Physiology
- Basic Physics
>Positioning of anatomy
- Patient Care
- Customer Service
> How to work independently and as a member of a team


## Required Intellectual abilities

DIntellectual requirements include ability to memorize, quick recall of learned information, application of critical thinking and problem solving in high stress scenarios as found in emergency rooms, intensive care units, and surgical suites.

The mission of the Radiologic Sciences Programs is to provide the health care community with ethical, competent, and professional radiographers The Program is guided by 4 goals
> 1. Clinical Competence in positioning and technical factor selection
2. Critical thinking and problem solving
3. Effective oral and written communication
4. Professional behavior demonstrated though general work habits and taking initiative through constructive feedback and supporting the needs of the department

## Employment opportunities

Bureau of Labor Statistics:
> Projected growth in Colorado is 25\% through 2028

- Annual salary is $\$ 63,000$ to $\$ 70,000$ (May 2021)
> Post Primary certifications available to enhance career and increase salary.
- Variable shifts available
- Workplace in hospitals, medical clinics and ambulatory care


## Post Primary certification

> Computed Tomography (offered at CCD)
> Mammography (offered at CCD)
>MRI (offered at CCD)
> Bone Densitometry
> Breast Sonography
> Vascular and Cardiac Interventional

- Visit the American Registry of Radiologic Technology for more credentialing options


## Why CCD? Affordability

- Affordable community college tuition

In state with Colorado Opportunity Fund (COF)
\$14,000 to \$16,000 entire program divided into 5 semesters

- Tuition and fee chart for CCD


## Why CCD? Hands-on Academic Learning

- Multiple Laboratories:
> 2 working x-ray rooms
> C-arm and portable equipment
> Digital CR/DR
> Skills lab equipped with hospital beds, carts, and wheelchairs
> Computer lab and computer classroom
> Anthropomorphic phantom (full size, infant, and pediatric) Real bone phantom that is poseable
> Anatomage 3-D cadavear table
> Longest running Radiologic Technology program in Colorado


## Why CCD? Dedicated Clinical Instructor Oversite

- Dedicated clinical instructor presence hired by CCD
- Clinical instructors oversee first year students at all hospital sites while in attendance
- Second year students rotate to multiple sites for increased experience in trauma, orthopedics, surgery, and pediatrics
- CCD is is the exclusive radiology program with clinical site placement at The Children Hospital campuses


# Why CCD? Rotations at multiple hospitals and clinics 

> The Children's Hospital Main campus
> The Children's Hospital North and South campuses
> The Medical Center of Aurora
> North Suburban Medical Center
> Presbyterian St. Luke's
> Sky Ridge Medical Center
> Kaiser Permanente-multiple locations
> Avista Adventist Hospital
> Denver Health Medical Center

- Porter Adventist Hospital
> Mountainview Pain Clinic for C-arm work


## Why CCD? JRCERT and HLC accreditation

- Program Accreditation voluntary
- Joint Review Committee on Education in Radiologic Technology
- A voluntary accreditation
- The Higher Learning Commission (HLC) of the North Central Association of Colleges \& Schools
> Transferable credits
JRCERT
20 N. Wacker Drive, Suite \#2850
Chicago, IL 60606-3182
(312) 704-5300

JRCERT contact information

## Why CCD? Program Effectiveness

- Program Effectiveness Data
- Exceeds benchmarks for
-ARRT examination pass rates
Program completion rates
〉Job placement rates 100\% since 2016
visit the RTE Program website for information

The RTE Program at CCD
RADIOLOGIC TECHNOLOGY AAS

## The Program

> 22 months Fall to Spring fullime (includes summer if RTE 101 is needed)

- First year Clinical Internship Monday and Wednesdays
- Classes Tuesday and Thursday 9-3:00 pm, Friday 9:00-10:30
- Summer Clinical Monday-Thursday, occasional weekends or evenings
- Second Year Clinical Internship Tuesday, Thursday and Friday
- Classes Monday and Wednesday
- Rigorous- grading scale is higher; $93 \%$ for an "A" versus $90 \%$ in general academic courses.
- Many classes include hands on time in the Radiology lab at Lowry which includes two energized imaging units, a mobile fluoroscopy unit and portable exam.
- Anatomage table
- American Registry of Radiologic Technologists certification exam after graduation


## Prerequisites

- MAT 1021 College Algebra- can advise MAT 1260 Statistics ( 10 year limit at time of fall program start)
- ENG 1021 or 1031*
- Social Science PSY 1001 or SOC 1001 PSY 2440*
- BIO 2101 and 2102 ( 7 year limit at time of program start)
- Recommend PHY 1105, can receive bonus in application scoring after interview if grade B or higher
- Recommend RTE 1001 as an elective taken at CCD
- *(preferred)


## Prerequisites and GPA

- Typically students have a 3.5-4.0 GPA for acceptance
> 2.8 general and 3.0 science minimum (prerequisite courses only)
- Can be in progress during the spring of application with all prerequisites completed by end of the spring semester
- Include class schedule, send midterm grades, final transcripts and grades
- Send all unofficial transcripts

The Application and Requirements

## The RTE program Application changed!

- The RTE program application now has a link on the website where all required documentation can be uploaded December 1 to end of day February $15^{\text {th }}$.
- Please have all required documentation available and upload then submit in the same timeframe or attachments may not save.
- If more than one school, there are 4 areas to submit unofficial transcripts that reflect prerequisite coursework for the Radiology
- The two essay questions will be typed directly into the application itself; The response for each is 1000 words.


## Application requirements

- December 1 to February 15 application acceptance
- Complete packet submission (attention to detail is key in healthcare)
- GPA and Interview weighed at 30 points each
- The other 40 points of score consists of:
$\downarrow$ Job shadow or in lieu of conditions due to pandemic/essay 10 points
- structured reference letters 10 points
- healthcare or face to face customer service 15 points
- RTE 101 course taken at CCD completed with B or higher 5 points
- After the above scores equal 100 points; additional points awarded after interview score is added for completion of PHY 1105 with B or higher added.
- We host virtual RTE information and advising sessions several times each semester. The dates and link are posted on the website. The applicant needs to include the date of attendance the Informational on their cover letter.


## Application completeness

> Enroll at CCD choose Associate of Science as major

- Complete the Radiology Program Application
- Resume and cover letter
- Include customer service and healthcare experience
> Include date of attendance at information and advising
- Include all contact information
- Include names of persons sending structured letters of reference


## Structured Letters of Reference

- Download the structured letter of reference form from the CCD RTE website
- Two are required from employers, instructors, or other professionals
> These are not personal references
- Letters should be included in packet in a sealed envelope and signature of the reference provider across the envelope flap
- Letters can be mailed to Center of Health Sciences 1070 Alton Way, Denver, CO 80230 Attention: Radiologic Technology Program
- Please include the names of persons who will submit the structured reference letters on your resume.


## Job Shadowing

- Twelve (12) hours of documented job shadowing is a component of the application. Download the Job Shadow Form for documentation of job shadowing experience. More than one copy will be need to be downloaded. Hours completed on separate days will require a new form (one form per day).
- Include form(s) in the application packet
- If unable to secure a location for job shadowing or have less than the required 12 hours, please click on the following link for Alternative to Job Shadowing_ and follow the instructions. You will not be required to complete the essay in Step 7 as there are new essay questions pertaining to the alternative to the job shadowing requirement.


## Job Shadow alternative

- Profile of Radiologic Technologist: Profile of Radiologic Technologist
- (6.5 minutes)
- Becoming a Radiologic Technologist: Becoming a Radiologic Technologist
- (32 minutes)
- My Job as a Radiologic Technologist: My Job as a Radiologic Technologist
- ( 1.5 minutes)
- The "Skinny" on the Job - Radiologic Technologist: The Skinny on the Job-Radiologic Technologist
- (5 minutes)
$\downarrow$
- X-ray Technology. What You Need to Know: X-Ray Technology What You Need to Know
- (5 minutes)


## How do l job shadow?

- Contact the Human Resource departments of hospitals in your area or the volunteer office
- Explain that you are interested in job shadow experience in Diagnostic Imaging to see if becoming a radiologic technologist would be a satisfying future career.
schedule time, be on time, observe and ask questions of the technologists
- Have job shadow experience form signed
- Include signed letter in the application upload
$>$ Make copies for your records


## Essay questions

- Complete the two essay questions below relating to job shadowing experience and/or the alternative videos
- Reflecting on your personal experience and impressions after job shadowing, what did you see or experience regarding the actual work of a radiology technologist that attracts you to this profession?
- What skills or personality traits do you possess, relating to your past experience and learned information from your job shadow experience, that speaks to how Radiology Technology and specifically admission into the program at the Community College of Denver, could be a future profession for you?
- 1000 words maximum for each essay response.


## Official and Unofficial transcripts

- Send official transcripts for all college courses to Office of Registration and Records
- Include a copy of all unofficial transcripts in online application

Include copy of student schedule with courses that will be in-progress during the spring semester

- CCD will not translate international transcripts
- NACES.org

After submission of application packet

## Scoring Rubric 100 points (bonus 5)

- GPA of prerequisites added 30 points
- Healthcare and customer service scored 15 points
- Structured reference letters scored 10 points
- Job shadowing/essay scored 10 points
- RTE 1001 course at CCD scored 5 points
- Top 40-45 candidates will be contacted for interview in late April and interviewed in early May
- Interviews 30 points; PHY 1105 bonus scoring added after the interview
- Program invitations to approximately 30 candidates and 5 alternates


## The Interview

- Attributes considered for and during interview:
> Verbal and non-verbal communication skills
> Healihcare and Customer Service Experience
- Apititude for healihcare
> Include relevant supplemental course work/degrees in discussion
> Preparedness for 40+hour/week academic \& clinical schedule
> Professionalism
> Appearance and punctuality


## Tips for success

- Gain healthcare experience:
> Volunteer at a hospital or nursing home
- Work at a healthcare facility
$>$ Research the profession to ensure it is a good fit for you
- Maintain a high GPA
> Interview:
> Dress professionally...even if interview is remote
> Arrive early
> Show enthusiasm for previous jobs/career
> Demonstrate aptitude for teamwork
> SAVE Money


## Scores

- Applicants will receive an email if not invited to the program or have an incomplete application
> Students may apply and interview a maximum of 3 times.
> If requested, the radiography program staff will provide recommendations to help candidates improve their chances for success the next year, if not invited into the program

The Program

## RTE 1001 Introduction to Radiology

$>$ This course is offered as a general elective
$>$ It is a CORE course to the actual Radiology Program and must be completed the summer prior to the fall start if invited into the program
$>$ Taking this course as an elective does not translate into admission to the Radiology
Technology Program

## RTE Program Schedule

> 22 months Fall to Spring fulltime (includes summer if RTE 1001 not taken prior to acceptance)

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- Summer Clinical Monday-Thursday, occasional weekends or evenings
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- Rigorous- grading scale is higher; $93 \%$ for an "A" versus $90 \%$ in general academic courses.
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- Anatomage table
- American Registry of Radiologic Technologists certification exam after graduation


## Degree Award and Certification

- Associate of Applied Science awarded at completion of program
- Eligible to take the ARRT Certification exam
>200 question proctored exam
-Recognized internationally and nationally


## Program Acceptance May with Fall semester start

Provisional invitation to program sent via email by mid-May

- Accept invitation via email response
- Send final grades for any in-progress courses
- Attend a mandatory orientation late June
- Register for RTE 1001 if not taken previously
- Pass mandatory 10 year background check and drug screen


## Background Drug Screen info

- Disqualifying offenses for Health Science Programs
- Marijuana is "legal" in Colorado and other states, it is still not legalized nationally.
- THC will show up in the drug panel and can disqualify
- Hospital clinical sites require a passing drug screen
- The certification body ARRT, has ethics standards, so offer a ethics review once accepted into the RTE program
- ARRT pre-application Ethics Review website


## Background check 10 year

## Disqualifying Offenses:

> Any conviction, plea of guilty or no contest, or deferred adjudication of the following criminal offenses (felony or misdemeanor), appearing on a criminal background check will disqualify an applicant for admission to a CCCS Health Program.
> There is no appealing this background check. It is mandatory.
> This is for CCD Health Sciences

1. Crimes of violence (assault, sexual offenses, arson, kidnapping, murder, any crime against an at-risk adult or juvenile, etc.). as defined in section 18-1.3-406 C.R.S. in the 10 years immediately preceding the submittal of application.
II. Any offense involving unlawful sexual behavior-same time limit as above.
III. Any crime, the underlying basis of which has been found by the court on the record to include an act of domestic violence, as defined in section 18-6-800.3 C.R.S. in the 7 years immediately preceding the sub'mittal of application.
IV. Any crime of child abuse, as defined in section 18-6-401 C.R.S.-same time limit as above.
V. Any crime related to the sale, possession, distribution or transfer of narcotics or controlled substances-same time limit as III.
vI. Crimes of theft-Felony has a 7 year limit; Misdemeanor has a 5 year limit

## Disqualifying offenses

VII. Any offense of sexual assault on a client by a psychotherapist, as defined in section 18-3-405.5 C.R.S. in the 7 years immediately preceding the submittal of application
VIII. Crimes of moral turpitude (prostitution, public lewdness/exposure, etc.)Same time limit as above.
IX. Registered sex offenders (NO time limit)
X. Any offense in another state, the elements of which are substantially similar to the elements of any of the above offenses.
XI. More than $\mathbf{1}$ DUI in the $\mathbf{7}$ years immediately preceding the submittal of application
Students who have successfully completed the terms of their deferred adjudication agreement might not be disqualified.
Subject to review by the ARRT as deemed necessary by Program Director.

ARRT Ethics review may be required

## ARRT Pre-Application Ethics Review

- Required for Eligibility to take the ARRT Exam:
$\star$ Graduate of an accredited radiology program
* ARRT Ethics Board approval to sit for Certification Exam
\& 100.00 cost
> To inquire about eligibility email or call:


## www.arrt.org

(651) 687-0048

Resolve status before entering RT program
Note: Required for anything other than traffic violations, even if charge was dropped

## Reference websites

- ARRT.org - American Registry of Radiologic Technologists; certification body
- ASRT.org - American Society of Radiologic Technologists; national professional organization
- JRCERT.org- Joint Review Committee for Education of Radiologic Technology; accreditation body
> CCD.edu college website; Academic Pathways-Health Sciences-Radiologic Technology


## FAQ

-How would a single parent do this full-time program?

- That is a great question, short answer, with perseverance and grit. We recommend no more that 20 hours of outside work due to the rigorous nature. It is possible to work more, but very difficult. Of course, any grants or financial aid support!
Remember that students will graduate with an AAS degree, and earn 22-26.00/hour. The past 4 years all students have obtained employment. Post primary certifications, CT, MR, or mammography earn additional wage \$5-10.00 more per hour.
$>$ That is where the grit comes in!

How much of program is available online?
None of the program is exclusively online. RTE 101 may be offered as a hybrid but is scheduled as face to face at Lowry campus

- Do you get points for being bi-lingual or knowing ASL?

There are not points, but in the cover letter, essays, or interview there are opportunities to communicate these skills to the interview panel. Medical translation is done by certified professionals hired by a hospital or working through a "translator phone service" contracted by the hospital.

## Additional Information

- Can I have facial piercing or visible tattoo's?
- Our clinical sites and the program require all facial piercings and visible tattoos are covered
- Can a professor write a reference letter?
- Yes, these are structured letters of reference from professionals, not personal recommendations. We need two, but we encourage applicants to send give out 3-4 with a stamped envelope addressed to the Lowry Center for Health and Natural Sciences.
How are DACA students received?
We do not ask about this status, We do not know whether a student is in this category during the application or program period. The program vision is to match the healthcare community with the surrounding diverse population.

