

# RADIOLOGIC TECHNOLOGY

## Associate of Applied Science Degree

Health Sciences Pathway- at Lowry  
 CCD.edu/Radiologic-Technology

### Radiologic Technology

In this program, you will learn to perform diagnostic x-ray procedures in a variety of settings, surgical suites, emergency rooms, within hospitals and clinics. Upon successful completion of the program, you will become part of a dynamic healthcare profession. This full-time program consists of academic courses and internships that are taken concurrently throughout 22 months. You will work with state-of-the-art equipment in our two energized x-ray labs, which includes mobile x-ray and fluoroscopy units, anthropomorphic phantoms, while utilizing the latest imaging technology. After successful completion of the program requirements, students will earn an Associate of Applied Science (A.A.S.) degree and are eligible to take the national certification examination through the American Registry of Radiologic Technologists (ARRT).

This program is accredited by the Joint Committee on Education in Radiologic Technology.

JRCERT can be contacted at JRCERT.org and in writing or by phone at:

The Joint Review Committee on Education in Radiological Technology  
 20 North Wacker Drive, Suite 2850  
 Chicago, Illinois 60606-3182  
 312.704.3500  
 mail@jrcert.org

Over the past five years, our graduates have had 100 percent job placement success in the field since 2016 and maintained a 92 percent pass rate on the ARRT exam. The average employment growth rate expected in the next 10 years is 9 percent for the U.S., and 33 percent in Colorado. Average entry-level wages are \$26 per hour. Graduates can add to their skills with post-primary certification in other diagnostic imaging modalities, three are offered at CCD: computed tomography, magnetic resonance, and mammography.

### PROGRAM ADMISSION REQUIREMENTS

For admissions requirements and application, please visit CCD.edu/Radiologic-Technology.

### PREREQUISITES

| Course                 | Title  | Credits   |
|------------------------|--|-----------|
| <b>First Semester</b>  |  |           |
| ENG 1021               | English Composition I: GT-CO1                  | 3         |
| PSY 1001               | General Psychology I: GT-SS3                   | 3         |
| BIO 2101               | Human Anatomy & Physiology with Lab I: GT-SC1  | 4         |
| <b>Subtotal</b>        |  | <b>10</b> |
| <b>Second Semester</b> |  |           |
| BIO 2102               | Human Anatomy & Physiology II with Lab: GT-SC1 | 4         |
| MAT 1240               | Math for Liberal Arts: GT-MA1                  | 4         |
| RTE 1001               | Introduction to Radiography                    | 2         |
| <b>Subtotal</b>        |  | <b>10</b> |
| <b>Total Credits</b>   |  | <b>20</b> |

### COURSE MAP

| Course                | Title                                | Credits   |
|-----------------------|--------------------------------------|-----------|
| <b>First Semester</b> |                                      |           |
| Fall                  |                                      |           |
| RTE 1011              | Radiographic Patient Care            | 2         |
| RTE 1021              | Radiologic Procedures I              | 3         |
| RTE 1041              | Radiographic Equipment and Imaging I | 3         |
| RTE 1081              | Radiographic Internship I            | 5         |
| <b>Subtotal</b>       |                                      | <b>13</b> |

### Second Semester

|                 |   |             |
|-----------------|---|-------------|
| Spring          |   |             |
| RTE 1022        | Radiologic Procedures II                      | 3           |
| RTE 1031        | Radiographic Pathology and Image Evaluation I | 1.5         |
| RTE 1042        | Radiographic Equipment and Imaging II         | 3           |
| RTE 1082        | Radiographic Internship II                    | 5           |
| <b>Subtotal</b> |   | <b>12.5</b> |

### Third Semester

|                 |                             |          |
|-----------------|-----------------------------|----------|
| Summer          |                             |          |
| RTE 1083        | Radiographic Internship III | 7        |
| <b>Subtotal</b> |                             | <b>7</b> |

### Fourth Semester

|                 |                              |           |
|-----------------|------------------------------|-----------|
| Fall            |                              |           |
| RTE 2021        | Advanced Medical Imaging     | 3         |
| RTE 2031        | Radiation Biology/Protection | 2         |
| RTE 2081        | Radiographic Internship IV   | 8         |
| <b>Subtotal</b> |                              | <b>13</b> |

### Fifth Semester

|                      |  |             |
|----------------------|--|-------------|
| Spring               |  |             |
| RTE 1032             | Radiographic Pathology and Image Evaluation II | 1.5         |
| RTE 2082             | Radiographic Clinical Internship V             | 8           |
| RTE 2089             | Radiographic Capstone                          | 3           |
| <b>Subtotal</b>      |  | <b>12.5</b> |
| <b>Total Credits</b> |  | <b>58</b>   |

**TOTAL CREDIT HOURS COMPLETED FOR THE DEGREE: 78 CREDIT HOURS**

### Certificates

Community College of Denver currently offers three post-primary certificates in radiologic technology.

- Computed Tomography
- Mammography
- Magnetic Resonance Imaging

### Computed Tomography

Health Sciences Pathway- at Lowry  
 CCD.edu/Computed-Tomography

**\*\*This program is not eligible for federal student aid.\*\***

Are you a registered radiologic technologist, radiation therapist, or nuclear medicine technologist? Advance your career with a certificate in computed tomography. This post-primary certification will increase your employment options and earning potential. Designed with the working technologist in mind, we're offering an online didactic course and flexible internship opportunities throughout the fall, spring, and summer semesters.

CCD offers a competency-based certificate that includes a two-credit online course, exceeding the requirement of the American Registry of Radiologic Technologists (ARRT).

The online didactic course is offered in summer, fall and spring semesters. The online course progresses at a flexible pace for an individualized learning experience. Once completed, you'll enroll in a 10-week clinical internship offered at area clinics and hospitals in the metro-Denver area. Your internship will prepare you to be job ready and are arranged by CCD's computed tomography program coordinator. To complete the program, you'll be evaluated by the supervising technologist at the clinical site and CCD's computed tomography instructors to ensure competency with your clinical skills and your ability to attain autonomy in all areas related to the CT modality. The ARRT requires a minimum of 125 competencies, but to reach the "job ready status" additional 5-week internship sections (2 credits) are available if more clinical time is needed.

### PROGRAM ADMISSION REQUIREMENTS

For admission requirements and application, visit CCD.edu/Computed-Tomography.

**COURSE MAP**

| Course                 | Title                         | Credits  |
|------------------------|-------------------------------|----------|
| <b>First Semester</b>  |                               |          |
| RTE 2057               | Computed Tomography Basics    | 2        |
| RTE 2055               | Multiplanar Sectional Imaging | 2        |
| <b>Subtotal</b>        |                               | <b>4</b> |
| <b>Second Semester</b> |                               |          |
| RTE 2080               | Internship                    | 4        |
| <b>Subtotal</b>        |                               | <b>4</b> |
| <b>Total Credits</b>   |                               | <b>8</b> |

Health Sciences Pathway- at Lowry  
 CCD.edu/Mammography

*\*\*This program is not eligible for federal student aid.\*\**

The medical imaging modality of mammography is an important tool used in the diagnosis of breast cancer. This program will assist you in obtaining the necessary didactic education and mandatory clinical competencies to prepare you to sit for the American Registry of Radiologic Technologists (ARRT) Mammography Certification Examination.

The program covers:

- specifics of equipment and instrumentation used in mammographic image production,
- patient care and positioning,
- radiation protection and safety,
- specifics of the Mammographic Quality Control Standards Act and its requirements for quality control testing,
- patient assessment and risk factors for breast disease,
- interventional procedures, and
- eight hours of breast tomosynthesis (DBT) and eight hours of full field digital mammography (FFDM).

After you complete the didactic course, your required clinical internship will be scheduled at a clinic two days per week until all competencies are mastered. This program exceeds the 16 ARRT requirements of didactic education and the 40 contact hours of instruction required by the Mammography Quality Standards Act of 1992 and 1998. To complete the program, you will be evaluated by the supervising technologist and CCD's mammography program coordinator to ensure you demonstrate proficient mammographic skills, and can demonstrate autonomy in the clinical environment.

**PROGRAM ADMISSION REQUIREMENTS**

For admission requirements and application, visit CCD.edu/Mammography.

**Course Map**

| Course                 | Title                   | Credits  |
|------------------------|-------------------------|----------|
| <b>First Semester</b>  |                         |          |
| RTE 2050               | Mammography             | 3        |
| <b>Subtotal</b>        |                         | <b>3</b> |
| <b>Second Semester</b> |                         |          |
| RTE 2070               | Clinical I: Mammography | 4        |
| <b>Subtotal</b>        |                         | <b>4</b> |
| <b>Total Credits</b>   |                         | <b>7</b> |

<sup>1</sup> Additional 2 credit internships are available if more time is needed to achieve competency.

**Magnetic Resonance Imaging**

Health Sciences Pathway- at Lowry  
 CCD.edu/Magnetic-Resonance

*\*\*This program is not eligible for federal student aid.\*\**

Are you a registered technologist certified through the American Registry of Radiologic Technologists (ARRT), American Registry of Medical Sonography (ARDMS), or Nuclear Medicine Technology Certification Board (NMTCB)?

If so, further your career with a certificate in magnetic resonance imaging (MR).

This post-primary certificate will increase your employment options and earning potential. Designed with the working technologist in mind, we are offering an online didactic course and internship opportunities throughout the Denver metropolitan area. This certificate includes a three credit online course that exceeds the requirements of the ARRT.

What you will learn and experience:

The online course is designed to allow a student to progress at a flexible pace for an individualized learning experience. Once completed, you will enroll in a 15-week internship during spring and fall, or 10-weeks during the summer to obtain the required competencies for the certificate and the ARRT. Throughout the internships, you will be evaluated by CCD's MR clinical instructor to ensure you have obtained the necessary clinical skills and are able to work independently so you can be job ready.

Additional internships are available should you need additional time.

| Course                 | Title                         | Credits   |
|------------------------|-------------------------------|-----------|
| <b>First Semester</b>  |                               |           |
| RTE 2060               | Magnetic Resonance Imaging    | 3         |
| RTE 2055               | Multiplanar Sectional Imaging | 2         |
| <b>Subtotal</b>        |                               | <b>5</b>  |
| <b>Second Semester</b> |                               |           |
| RTE 1084               | Internship                    | 4         |
| <b>Subtotal</b>        |                               | <b>4</b>  |
| <b>Third Semester</b>  |                               |           |
| RTE 2084               | Advanced Clinical (Specialty) | 4         |
| <b>Subtotal</b>        |                               | <b>4</b>  |
| <b>Total Credits</b>   |                               | <b>13</b> |

<sup>1</sup> Additional 2 credit internships are available if more time is needed to achieve competency.