Radiography

What does a radiographer do?

Radiographers use sophisticated x-ray equipment to image the structures of the body, as prescribed by the physician, to diagnose injury or disease. Their responsibilities require a knowledge of anatomy, physiology and pathology, patient positioning, radiographic technique, radiation safety, patient care and communication. Radiographers use critical-thinking to accommodate a variety of patient needs and imaging scenarios. More information is available at *www.arrt.org*.

What skills are needed to excel in this profession?

- Good critical thinking skills
- Good written and verbal communication skills
- The ability to work well with others and care for patients
- A professional attitude and appearance

Note to students: You are entering a profession that operates 24 hours a day, 7 days a week, and 365 days a year. Work shifts include day, evening, and night hours.

Where do radiographers work?

Radiographers work primarily in hospitals but other employment opportunities include clinics, physician's offices, freestanding imaging centers, manufacturing plants, research centers, outpatient surgical centers, mobile imaging centers, veterinary offices and hospitals, and teleradiology services.

Why should I choose HCC's Radiography Program?

- HCC's radiography program is nationally accredited by the Joint Review Committee on Education in Radiologic Technology
- Excellent pass rate on the American Registry of Radiologic Technologists (ARRT) national certification examination in radiography (five-year first time pass rate=90 percent)
- HCC offers the ability to complete advanced certifications in computed tomography (CT) imaging, magnetic resonance imaging (MRI), and a letter of recognition in mammography
- Imaging and simulation labs are well-equipped
- Clinical education is completed in state-of-the-art healthcare facilities offering a wide range of imaging services
- This program is also designated as a Health Manpower Shortage Program (Therefore, some residents of Maryland, enrolled in this program, may be eligible for in-county tuition rates for courses required for program completion.)

Is HCC's Radiography Program accredited?

The program is accredited by the Joint Review Committee on Education in Radiologic Technology

PROGRAM OPTIONS

✏ A.A.S. Degree, Radiography

CAREER OUTLOOK

MEDIAN SALARY	EMPLOYMENT
$67K for Radiologic and MRI Technologists	264,000 jobs in U.S. 6% growth in next ten years

(source: www.bls.gov/ooh)

(JRCERT). The program has maintained JRCERT accreditation since its first review in 1975 and is currently accredited. More information is available at *www.jrcert.org*.

Am I eligible to sit for the national certification exam in radiography?

Students who successfully meet the American Registry of Radiologic Technologists ethics requirement and complete HCC's Radiography Program are eligible to sit for the ARRT certification examination. Information on the ethics requirement for ARRT certification can be found on the following website: *www.arrt.org*. ARRT certification is required for employment.

Are there advancement opportunities for a radiographer?

Radiographers enjoy a wide range of career advancement opportunities such as specialized imaging careers in computed tomography (CT), magnetic resonance imaging (MRI), mammography, diagnostic medical sonography, education, and management. HCC currently offers advanced certifications in CT, MRI and Mammography.

Is state licensing required for radiographers?

Currently, there are licensing requirements for radiographers in approximately two-thirds of the states. Maryland, West Virginia, and Virginia require radiographers to have a license to practice.

How do I apply to HCC?

Students applying to HCC for the first time can apply online or download and complete an application for admission. There is no fee to apply to HCC. You will need to submit official college transcripts from all colleges attended to the Office of Admissions and Enrollment Management. To find out more about the application process, go to *www.hagerstowncc.edu/admissions*.

Submission of the supplemental application for the radiography program is required to place your name on the applicant list for the program.

To find the supplemental application, go to *www.hagerstowncc.edu/admissions/forms-documents*.

What are the admission requirements for the radiography program?

Admission to HCC does not guarantee admission to the radiography program. The requirements listed below must be completed and submitted to the Office of Admissions and Enrollment Management by the application deadline of February 1.

- Submit a complete program application known as the Supplemental Application for the radiography program.
- Submit official transcripts from all colleges attended (students taking classes at HCC do not need to submit an HCC transcript).
- Submit official TEAS scores. Official TEAS score reports are required to be sent through the ATI site for TEAS taken at locations other than the HCC Testing Center. Students who do take the TEAS at HCC are encouraged to bring a copy of the scores or email the scores to the HCC Admissions Office. Applicants will not be considered for admission to the program until they achieve a 69% or higher for Reading, a 65% or higher for Mathematics, a 65% or higher for Science, and an Adjusted Individual Total Score of at least 60%. Visit *www.hagerstowncc.edu/teas* for information on the TEAS test.
- Complete and submit a Radiography Observation Verification form which documents 8 hours of job shadowing in a hospital setting. Job shadowing experiences must be completed between June 15th and December 15th of the current application cycle. The Admissions Office will not retain submitted forms for successive application cycles.
- Applicants must have BIO 116 completed at the program application deadline. Also, it is strongly recommended that the following courses are completed at the application deadline: an Arts/Humanities Elective, ENG 101 - English Composition, MAT 114 - Introduction to Applied Algebra,

and PSY 101 - General Psychology. If these courses are not completed, they must be in-progress at the application deadline. Students who decide to take BIO 203 and BIO 204 instead of BIO 116 must have BIO 203 completed and BIO 204 in-progress at the application deadline.

The application deadline is February 1 each year with the accepted class beginning program courses in May. The radiography program is a selective admissions process and students are accepted based on a specific point system. Applicants are notified by letter as to acceptance or non-acceptance.

What are the estimated costs for the radiography program?

A list of the estimated costs for the radiography program can be viewed at *www.hagerstowncc.edu/medical-imaging*.

What are the requirements and expectations for the clinical component?

Students accepted into the radiography program must satisfactorily complete the following: all requirements on the health form, drug screen, fingerprinting and background check, American Heart Association Healthcare Provider CPR, medical terminology, and documentation of computer literacy. Students enrolled in the Radiography Program are assigned to healthcare facilities within the tri-state region. Students are expected to abide by the rules and protocols of the College, program, and the facility, and are also expected to provide their own transportation to the facility. Clinical education assignments are completed on a semester basis and will include day, evening and weekend schedules between the hours of 6 a.m. and 9 p.m. Students are expected to be in proper uniform with appropriate identification during all clinical education assignments.

What are the academic requirements for the radiography program?

Students are expected to achieve a minimum grade of 75 percent in each radiography course to progress to the next semester of the program. Additionally, students must achieve a 78 percent overall average on all exams. Misconduct in the clinical education site may result in loss of clinical placement and/or program dismissal. Failure to meet program, course, technical, health, and radiation standards may result in loss of clinical placement and/or program dismissal.

How do I transfer credits from another school?

Applicants may transfer general education courses from other regionally accredited institutions. Official transcripts from all institutions attended should be sent directly to the Office of Admissions and Enrollment Management at HCC. Upon completion of a three-credit course at HCC, transfer credits become part of the student's official transcript at HCC.

Contact the Medical Imaging Programs Coordinator for more information.

Technical Standards

There are technical standards and skill requirements which students are expected to possess and demonstrate in order to be successful in this program. Final acceptance into the Radiography program is contingent upon students meeting the program's technical standards which are evaluated at orientation. More information on these

standards can be found at *www.hagerstowncc.edu/medical-imaging*.

Vaccine Requirements

Several immunizations are required as part of your health documentation, including: HEP B 3 vaccine series OR Positive immunity titer, Tetanus (Tdap) within the last 10 years, QuantiFERON®-TB, Varicella 2 vaccine series OR positive immunity titer, MMR 2 vaccine series OR positive immunity titer, the Flu vaccine (fall and spring).

Since many individuals fail to maintain immunity over time, you may be required to repeat vaccination series/ receive a booster in order to demonstrate positive immunity. Positive immunity titers are required to proceed with Clinical or Externship rotations in all Health Sciences Programs. It is the student's responsibility to verify immunity prior to the start of the program and take the necessary steps to ensure positive immunity by the health documentation deadline provided to each cohort.

Other Requirements

An American Heart Association (AHA) Basic Life Support is required for healthcare providers (the AHA version is required for your licensure exams).

A.A.S. Degree
Radiography
(Three-Year Pathway)

General Education Requirements   19-23 credits
Arts/Humanities
Select Arts/Humanities course from approved General Education course list.. 3

Behavioral/Social Sciences
PSY   101   General Psychology........................... 3

Biological/Physical Science
BIO   116   Human Anatomy and Physiology for Allied Health...................................... 4
OR
BIO   203   Human Anatomy & Physiology I....... 4
AND
BIO   204   Human Anatomy and Physiology II.... 4
Students who plan to transfer should discuss science requirements with their advisor

Diversity
Select Diversity course from approved General Education course list 3

English
ENG   101   English Composition 3
OR
ENG   101E   English Composition for English Language Learners 3
A minimum grade of "C" or better is required for ENG 101 and ENG 101E

Mathematics
MAT   114   Introduction to Applied Algebra 3
OR
MAT   160   Precalculus 3

Radiography Course Sequence

Program Requirements   50 credits
First Year – Summer Semester I
RAD   101   Radiography I..................................... 2
RAD   103   Radiographic Positioning I 3
RAD   109   Patient Care for Radiographers........ 3

First Year – Fall Semester I
HIM   102   Medical Terminology 3
RAD   102   Radiography II.................................... 2
RAD   104   Radiographic Positioning II 3
RAD   106C   Clinical Technique I........................... 2

First Year – Spring Semester I
RAD   105   Radiographic Positioning III.............. 3

RAD   108C   Clinical Technique II.......................... 2
RAD   111   Radiological Physics Theory 3

Second Year – Summer Semester II
RAD   200C   Clinical Practicum............................. 4
Second Year – Fall Semester II
RAD   202   Advanced Medical Imaging Concepts... 2
RAD   205C   Clinical Technique III......................... 4
RAD   215   Pathology for Imaging Sciences 3
RAD   230   Radiographic Image Analysis............. 2

Second Year – Spring Semester II
RAD   201   Radiographic Imaging Concepts 3
RAD   211C   Clinical Technique IV 4
RAD   203   Radiation Biology.............................. 2

Degree Requirement...............................69

A.A.S. Degree
Radiography
(Two-Year Pathway)

First Year – Summer Semester I
BIO   116   Human Anatomy and Physiology for Allied Health...................................... 4
RAD   101   Radiography I..................................... 2
RAD   103   Radiographic Positioning I 3
RAD   109   Patient Care for Radiographers........ 3
Students who plan to transfer should discuss science requirements with their advisor

First Year – Fall Semester I
RAD   102   Radiography II.................................... 2
RAD   104   Radiographic Positioning II 3
RAD   106C   Clinical Technique I........................... 2
Gen   Ed   Diversity 3

First Year – Spring Semester I
RAD   105   Radiographic Positioning III.............. 3
RAD   108C   Clinical Technique II.......................... 2
RAD   111   Radiological Physics Theory 3
ENG   101   English Composition 3
MAT   114   Intro to Applied Algebra 3
OR
MAT   160   Precalculus 3

Second Year – Summer Semester II
RAD   200C   Clinical Practicum............................. 4

Second Year – Fall Semester II
RAD   202   Advanced Medical Imaging Concepts... 2
RAD   205C   Clinical Technique III......................... 4
RAD   230   Radiographic Image Analysis............. 2
PSY   101   General Psychology........................... 3
RAD   215   Pathology for Imaging Sciences 3

Second Year – Spring Semester II
RAD   201   Radiographic Imaging Concepts 3
RAD   203   Radiation Biology.............................. 2
RAD   211C   Clinical Technique IV 4
Gen   Ed   Arts/Humanities 3

Degree Requirement...............................69