

Radiography Program

Admissions Information Packet



Mercer County Community College Radiography Program

Dear Prospective Student,

Thank you for your inquiry about the Mercer County Community College Radiography Program. The information contained in this packet provides a synopsis of the curriculum, criteria for admission, and requirements once you have been accepted into the professional phase of the Radiography program. I encourage you to delve further into our program and invite you to visit the Radiography program website <https://www.mccc.edu/radiography/>

Upon completion of the Associate in Applied Science Degree in Radiography, graduates are eligible to take the American Registry of Radiologic Technologists Examination in Radiography (ARRT) to become nationally certified and licensed by the New Jersey Radiologic Technology Board of Examiners. The graduates of our program have consistently earned scores that have met or exceeded the national and NJ State averages.

The MCCC graduates are employed by hospitals, clinical, diagnostic imaging centers and the offices of private physicians locally and nationwide. I encourage you to explore the profession through the American Society of Radiologic Technologists found at <https://www.asrt.org/main/career-center> and the American Registry of Radiologic Technologists <https://www.arrt.org/pages/about-the-profession/learn-about-the-profession>

Radiographers utilize medical x-ray equipment to produce images of the bones, organs, tissues and vessels in the body while ensuring high quality patient care. Radiographers may choose to specialize in other professional disciplines such as computed tomography (CT), magnetic resonance imaging (MR), mammography, diagnostic medical sonography, nuclear medicine technology, or radiation therapy by completing additional educational and certification requirements.

Radiography is a rewarding profession where opportunities abound. If you have questions after reading the information contained in this packet or on the aforementioned websites, please contact me by e-mail greerd@mccc.edu or phone (609) 570-3341. I look forward to assisting you to attain your goal as a radiographer.

Best Regards,

Deborah Greer

Deborah Greer, M.Ed., R.T.(R)(M), Professor
Coordinator Radiography Program & Advanced Imaging
Programs

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Radiography Program Description

The Associate in Applied Science Degree (A.A.S.) in Radiography combines courses in general education and Radiography with supervised clinical experience in area hospitals. Graduates are eligible to take the American Registry of Radiologic Technologists (ARRT) Examination in Radiography to be nationally certified and licensed by the State of New Jersey.

Pre-Professional Phase:

The pre-professional phase includes general education course in science, mathematics, English, social science, and diversity. Students may enroll in general education courses on a full-time (12 credits or more) or part-time (11 credits or less) basis. Many general education courses are offered during the day, evening, weekend and through Mercer Online. General education classes are offered on the West Windsor Campus and the James Kerney Campus in Trenton. Students are accepted into the professional phase of the program based upon the published acceptance criteria described in this packet.

Professional Phase:

The Radiography (RAD) courses are offered on the West Windsor campus during weekday, daytime hours with an approximate 30 hour weekly time commitment spanning Monday – Friday. Students may be scheduled for evening laboratory and laboratory assessments throughout the program and an evening clinical education session in the final semester.

The Radiography professional phase courses start each fall term and span a total of six academic semesters including two summer sessions. Courses are offered sequentially for a period of 22.5 months and may not be completed part-time.

Program Resources for Current and Future Students

Radiography Faculty Advisors:

Deborah Greer, M.Ed., R.T.(R) (M)

Program Coordinator

Office: HS130

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HeatherHummel-Ayansola

Clinical Coordinator

Office: HS132

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Faculty advisors serve as the primary method for course advisement and source of information about the radiography program. Students should meet with their faculty advisor during the first semester at MCCC to establish an action plan toward acceptance into the professional phase RAD courses. RAD program faculty advisors are determined based upon the student's last name: Students whose last name begins with AL are advised by Professor Deborah Greer; students whose last name begins with M-Z, are advised by Professor Heather Hummel-Ayansola.

Enrollment Center:

The Enrollment Center provides assistance with admission application, course registration, financial aid, tuition payment and more. <https://www.mccc.edu/onestop.shtml>

Radiography Program Accreditation

The Radiography Program is accredited by the Joint Review Committee on Education in Radiologic Technology, 20 N. Wacker Drive, Suite 2850, Chicago, IL 60606-3812 and the NJ Radiologic Technology Board of Examiners, 25 Arctic Parkway, PO Box 415, Trenton, NJ 08625. Accreditation information may be found at the respective website <https://www.jrcert.org/> <https://www.nj.gov/dep/rpp/tec/index.htm>

The Radiography Program's program effectiveness data is available on the radiography website <https://www.mccc.edu/radiography/> and the JRCERT website <https://www.jrcert.org/programs/mercer-county-community-college/>

Radiography Program Mission & Goals

Mission Statement:

The Radiography Program sponsored by Mercer County Community College welcomes a diverse student population of all ages from a wide variety of backgrounds, abilities, interests, levels of education, and economic circumstances to a challenging and supportive environment. Faculty and clinical affiliate personnel work collaboratively to ensure student success, and offer the best college education and learning experience possible to qualified men and women. In addition, to prepare and graduate caring, professional, knowledgeable, and knowledgeable radiographers for entry level positions while encouraging life-long learning.

Goals:

GOAL 1: Students will apply the essential skills to perform diagnostic radiographic procedures competently and professionally as entry level radiographers.

Student Learning Outcomes:

Students will employ correct positioning skills

Students will select technical factors to produce diagnostic quality images

Students will correctly apply radiation safety principles

Students will accurately apply patient care principles

GOAL 2: Students will communicate effectively in a health care facility.

Student Learning Outcomes:

Students will employ appropriate communication skills with patients and staff

Students will clearly convey concepts and ideas through oral and written communications

GOAL 3: Students will apply effective critical thinking skills.

Student Learning Outcomes:

Students will modify imaging procedures to accommodate non-routine patients

Students will analyze images and identify corrective measures to improve the quality

GOAL 4: Students will exercise values and attitudes consistent with professional practice.

Student Learning Outcomes:

Students will demonstrate professionalism and integrate into clinical practice

Students will exhibit professional ethics and values consistent with clinical practice

College Admissions Overview

<http://www.mccc.edu/admissions.shtml>

- Complete an admissions application online; select Health Science Radiography as your intended major
- Arrange for final high school transcripts or GED scores (showing proof of completion), immunization records (for full-time students) and college transcripts to be sent to the Student Records office. <https://www.mccc.edu/registrar-transcript-evaluation.shtml>
- Take the English placement test if required. Refer to the steps to enroll at https://www.mccc.edu/admissions_steps-firsttime.shtml

Transfer Credit

Credits from Other Colleges:

To have credits from another college reviewed for transfer, the student must request that college to send an official transcript of his or her coursework to Mercer County Community College, Attention: Student Records. In general, you can expect to receive credit for general education college courses in which you earned a grade of "C" or higher if it is comparable to a course required in the radiography program. The general education courses are often not accepted if the credits are more than ten years old. A minimum grade of "C+" is required for science and mathematics courses and expire after five years. Anatomy & Physiology I and II (BIO103, BIO104) may be transferred provided the 8 credits were taken at the same college. Visit <https://www.mccc.edu/registrar-transcript-evaluation.shtml> for additional information.

International Students

If you have completed university-level courses in your home country and are interested in transferring credits to Mercer, you must submit an official evaluation report of your transcript. Visit <https://www.mccc.edu/registrar-transcript-evaluation.shtml> for additional information regarding the process for academic document review.

Radiography
Associate in Applied Science Degree

Code Course (lecture/lab/clinical hours)	Credits
PRE-PROFESSIONAL PHASE FIRST SEMESTER	
BIO 103 Anatomy and Physiology I (3/3)	4
ENG 101 English Composition I (3/0)	3
MAT 125 Elementary Statistics I (3/0)	3
PSY 101 Introduction to Psychology (3/0)	3
PRE-PROFESSIONAL PHASE SECOND SEMESTER	
BIO 104 Anatomy and Physiology II (3/3)	4
ENG 102 English Composition II (3/0)	3
PHY 109 Fundamentals of Physics (2/2)	3
— — General Education elective *	3
PROFESSIONAL PHASE	
FIRST SEMESTER (Fall)	
RAD 102 Introduction to Radiography and Patient Care (1/2)	2
RAD 119 Principles of Imaging Science I (2/0)	2
RAD 127 Radiographic Procedures I (3/3/210 hours)	6
SECOND SEMESTER (Spring)	
RAD 120 Principles of Imaging Science II (2/2)	3
RAD 128 Radiographic Procedures II (2/3/225 hours)	6
SUMMER SESSION	
RAD 117 Radiation Protection and Biology (2/0)	2
RAD 207 Clinical Experience Practicum (0/0/225 hours)	2
THIRD SEMESTER (Fall)	
RAD 217 Advanced Imaging Modalities (3/0)	3
RAD 228 Radiographic Procedures III (2/3/340 hours)	7
FOURTH SEMESTER (Spring)	
RAD 224 Introduction to Pathology (2/0)	2
RAD 232 Imaging Equipment and Radiography Seminar (3/2)	4
RAD 240 Advanced Clinical Experience I (0/0/340 hours)	3
SUMMER SESSION	
RAD 242 Advanced Clinical Experience II (0/0/225 hours)	2
Total Credits	70

NOTE: RAD 127, 128, and 228 require 15-30 minutes each week for competency testing in the laboratory.

*Select PHI 204 or 205, or course from Diversity and Global Perspective general education category.

NOTE: Students must earn a minimum grade of C+ in BIO 103 and 104, PHY109, MAT125, and all RAD courses. A minimum grade of C is required in all other general education courses.

Acceptance Requirements for the Professional Phase of the Radiography Program

Admission to Mercer County Community College (MCCC) in Health Science Radiography does not automatically qualify a student for acceptance into the professional phase of the Radiography Program. Students should meet with their faculty advisor during the first semester at MCCC to establish an action plan toward acceptance into the RAD courses.

Candidates submit the radiography application for the professional phase courses February 1 - 28. Applications will not be accepted before or after these dates. Acceptance status letters are mailed in April to candidates according to the application criteria described below until all seats are filled. The entire process may extend into the early part of the summer term based on the current pool of candidates. Applications are not held from year to year as there is no wait list.

Students who completed all required science, mathematics, and general education courses by the application due date are ranked highest. Students who have pre-professional courses in progress in the spring semester the application is submitted will be considered next. Students with the least number of general education courses completed are ranked lowest. To be eligible for the radiography program, all science and mathematics courses must be completed by the end of the spring semester the application is submitted. Details regarding the applicant ranking is available on the radiography website www.mccc.edu/radiography

Criteria for Acceptance

Following are the requirements for acceptance into the Radiography Program:

1. You must be a MCCC student with a minimum 2.5 GPA documented on your MCCC transcript to be accepted into the professional phase radiography courses.
2. Complete BIO103, BIO104, PHY109, and MAT 125 with a grade of "C+" or higher. One or more of the mathematics and/or science courses may be in progress in the semester of petition submission (spring). Science and mathematics courses expire after ten years and must be current through the semester commencing Radiography courses (fall).
3. Complete radiography general education courses with a grade of "C" or higher. One or more of the general education courses may be in progress or incomplete in the semester you submit the radiography application (spring).

4. All mathematics, science, and general education courses that are earned within two (2) attempts will be ranked higher for the professional phase of the radiography program.
5. You must retain active status at MCCC.

Professional Phase of the Radiography Program

When you have been accepted into the professional phase of the Radiography program, you will receive a letter with specific information regarding the process to begin the Radiography courses. You will be required to attend an orientation session conducted by radiography program faculty. During this mandatory orientation session, you will be given course registration material and additional entrance requirements.

Suspension/Expulsion Policy

Purpose: To ensure that opportunities within each health profession program are afforded to those students who have not violated college or health profession program policies

Audience: Nursing, Medical Laboratory Technology, Radiography, & Physical Therapist Assistant

1. Students who have been suspended or expelled from Mercer County Community College due to violations of either the Student Conduct Code OMB 501B or for Academic Integrity Violations, will no longer be eligible to participate in any of the Health Professions programs listed above, either as a re-admission or initial admission.
2. Students who have been dismissed from any of the Health Professions programs listed above will no longer be eligible to participate in any of the Health Professions programs listed above, either as a re-admission or initial admission.

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Criminal Background Check

Radiography clinical affiliations require students to complete a criminal background check annually. The criminal checks must be completed prior to commencing the first semester radiography courses and again prior to the start of the fourth semester. A positive criminal background check may preclude you from being accepted into the professional phase of the radiography curriculum, future certification by the A.R.R.T., and licensure by the NJ Radiologic Technology Board of Examiners.

ARRT Ethics Requirements

The ARRT Ethics Board will determine the applicant's eligibility to take the national certification examination in Radiography. If you have concerns about a potential ethics violation you may submit the ARRT pre-application ethics review pre-application form before you apply for the professional phase of the radiography program.

Consider submitting the ethics review pre-application if you've faced:

- Traffic driving violations under the influence of drugs or alcohol
- Traffic violations charged as a misdemeanor or felony
- Misdemeanor or felony charges or convictions
- Charges or convictions—including those that were stayed, withheld or deferred, set aside, or suspended
- Any plea of guilty, Alford plea, or plea of no contest (nolo contendere)
- Court conditions applied to your charge—including court supervision, probation, or pretrial diversion
- Disciplinary actions taken by a state or federal regulatory authority or certification board
- Military court martial
- Suspension, dismissal or expulsion from an educational program you attended to meet ARRT certification and registration requirements
- Serious honor code (academic) violations as described in our Rules of Ethics, such as patient abuse, violating patient confidentiality, and cheating

Additional information may be obtained at <https://www.arrt.org/pages/earn-arrt-credentials/initial-requirements/ethics/ethics-review-preapplication> or by contacting the Radiography Program Coordinator.

Tuition and Fees

Information regarding current tuition and fees is available at

https://www.mccc.edu/admissions_tuition.shtml#1

Costs and Clinical Requirements

In addition to the tuition and fees established by the college, students in the professional phase of the radiography program can expect higher than average textbook, and campus laboratory uniform estimated at \$1,000.00 first semester. The ARRT radiography certification application is estimated at \$250.00 submitted in the spring II semester. Students are responsible for transportation to and from assigned clinical affiliate.

Clinical Affiliate Requirements:

- American Heart Association BLS Certification for the Healthcare Provider
- Physical exam and immunizations
- COVID-19 vaccine in accordance with clinical affiliate guidelines
- Personal medical insurance
- Annual PPD testing
- Annual student liability insurance
- Annual criminal background check
- Annual urine drug screen
- Annual vaccine(s) in accordance with clinical affiliate guidelines
- Uniform for clinical education and campus laboratory

Health Requirements

Students accepted into the professional phase of the Radiography Program are required to meet the clinical education health requirements. Students must complete a physical examination with required laboratory tests, immunizations, flu vaccine, COVID-19 vaccine, and urine drug screen in accordance with policies in effect at the start of the professional phase of the radiography program. The physical exam, laboratory tests and/or immunizations must be dated within one year of commencing the first semester professional phase radiography courses. The flu vaccine, PPD, and urine drug screen are completed annually in accordance with established timeframe policies. Vaccine requirements are subject to change.

Medical Insurance

All students are required to maintain current medical insurance for the duration of the professional phase of the radiography program. Attestation and/or proof must be submitted upon acceptance. Students who do not have medical insurance are encouraged to seek options upon acceptance into the professional phase radiography courses or sooner. It takes approximately three months to obtain medical insurance through the State of NJ program <https://www.nj.gov/getcoverednj/>

Student Liability Insurance

All students are required to purchase liability insurance for radiologic technologist students. Students must renew the liability insurance annually and must be maintained current through completion of the Radiography Program. The approximate cost is \$40.00 and must be renewed annually. Details will be provided during the accepted student orientation.

BLS Certification for the Health Care Provider

BLS (CPR and AED) Program offered through the American Heart Association is required to commence the professional phase of the Radiography Program. Certification must be maintained current through completion of the Radiography Program courses. The cost is approximately \$75.00 for the two-year certification.

Clinical Affiliations

Students are required to provide their own transportation to the clinical sites to which they are assigned. All affiliate hospitals are located in Mercer and surrounding counties and are less than 50 miles from the college. Students should not expect that the college will be able to accommodate their geographic preferences for clinical assignments.

The following health care organizations are affiliated with MCCC for the purpose of clinical education activities:

Hospital Affiliations

- Capital Health Regional Medical Center (Mercer County)
- Capital Health Medical System - Hopewell (Mercer County)
- Centra State Healthcare System (Monmouth County)
- Hunterdon Healthcare System (Hunterdon County)
- Penn Medicine Princeton Medical Center (Middlesex County)
- Robert Wood Johnson University Hospital at Hamilton (Mercer County)

Outpatient Imaging Center Affiliations

- Princeton Radiology Associates, P.A.
 - Freehold (Monmouth County)
 - Marlboro (Monmouth County)
 - Monroe (Middlesex County)
 - Princeton (Mercer County)
 - Quakerbridge (Mercer County)
- University Radiology Group
 - East Brunswick (Middlesex County)
 - Freehold (Monmouth County)
 - Monroe (Monmouth County)
 - Somerset (Somerset County)
- Radiology Affiliates Imaging
 - Lawrenceville (Mercer County)

Rights and Responsibilities of the Pregnant Student in the Professional Phase

The program's pregnancy policy is based on the United States Nuclear Regulatory Commission (NRC) recommendations. This policy has two primary goals: (1) To minimize the potential for exposure to ionizing radiation; and (2) to assure that the student is able to complete all program courses. The pregnancy policy will be provided to candidates during their first advisement session with program faculty. Applicants may obtain a copy of the policy in advance by submitting a request to the Radiography Department. A completed form is required prior to commencing Radiographic Procedures I. (RAD 127) and co-requisite Radiography courses.

Safety

The Radiography Program complies with all State of New Jersey regulations covering radiation safety as required under Administrative Code, Title 7, Chapter 28, as applicable. Students cover basic radiation safety as part of its pre-clinical orientation in the fall semester. At that time, students also receive a Clinical Education Student Handbook that includes sections on radiation protection and MRI Safety (Student Radiation Protection and Monitoring and Student Safety in Magnetic Resonance Imaging).

Students receive instruction on imaging equipment, accessories, optimal exposures factors and proper patient positioning beginning with the first semester professional phase courses and learn to apply them during clinical education under the supervision of licensed and registered radiographers. Additional course work reinforces concepts of radiation safety until program completion.

Essential Functions for Radiography Students

The essential functions outlined below are meant to inform prospective radiography students regarding the attributes and abilities that they should possess in order to be successful. This document will not be used as the basis for determining eligibility to begin radiography studies at MCCC, nor will it be used during the professional phase selection process.

PERSONAL ATTRIBUTES AND PHYSICAL REQUIREMENTS EXPECTED OF THE RADIOGRAPHER

INTELLECTUAL:

Ability to synthesize classroom and clinical instruction to comprehensively apply knowledge of anatomy and physiology, radiographic positioning, image production and evaluation, radiation physics and protection, and patient care to each radiographic and fluoroscopic procedure performed.

EMOTIONAL/MENTAL:

Ability to provide empathetic care to all patients with whom the radiographer interacts without regard to the personal attributes of the patients. Possess the ability to work with others in the completion of tasks for the benefit of patients. Have the stability to handle stressful situations requiring clear thinking and presence of mind, especially in life-threatening situations. Be alert to patient's need for safety and comfort.

VISUAL:

Ability to read and understand the words, numbers and measurements on a variety of devices and equipment used in a medical facility in normal reading light or where illumination is back-lit. Perform radiographically-related tasks in dimly lit procedure rooms during fluoroscopic procedures using scotopic (dark-adapted) vision.

VERBAL/WRITTEN:

Possess written and verbal skills sufficient to effectively communicate with patients and members of the health care team in the English language. Ability to clearly and audibly explain procedures, give instructions and direction, and ask appropriate screening questions to patients in the English language. Understand written and verbal instructions given by physicians in the English language.

HEARING:

Ability to hear and recognize alarms on a variety of equipment used while within the confines of, or near, the rooms in which procedures are being done. Ability to hear a patient who may call for immediate assistance while within the confines of, or near, the rooms in which imaging procedures are being done. Ability to hear and understand instructions given by physicians in the English language.

OTHER PHYSICAL:

Ability to manipulate locks, dials, switches, toggles and other devices on equipment in order to perform routine radiographically-related tasks.* Ability to draw solutions and medications into syringes in the proper doses.* Ability to push, pull and lift as necessary to perform routine radiography-related tasks. Ability to exercise reasonable care in the control of wheelchairs and stretchers while transporting patients. Ability to spend long periods standing and walking with or without wearing coat-length lead protective garments.

*Graduates wishing to practice medical radiography in the State of New Jersey must be licensed by the Department of Environmental Protection. Only licensed radiographers can operate medical x-ray equipment on human beings. Some medical facilities may require certification for the radiographer to perform venipuncture and/or administer iodinated contrast media intravenously.

**PROFICIENCY STANDARDS TO FULFILL THE DEGREE REQUIREMENTS OF THE
MERCER COUNTY COMMUNITY COLLEGE RADIOGRAPHY PROGRAM
AND EARN LICENSURE TO PRACTICE IN NEW JERSEY**

1. Positions patients on the radiographic table or wall device to obtain optimal images of relevant radiographic anatomy of the head, neck, abdomen, pelvis, upper and lower extremities, covering the musculoskeletal, respiratory, cardiovascular, neurological, gastrointestinal and genitourinary systems. Utilizes the necessary positioning and immobilization devices to ensure accuracy and patient comfort.
2. Communicates with patients to reduce anxiety and to instruct in the proper gowning and positioning for each radiographic study performed. Explains the dietary preparation to patients anticipating radiographic studies of the gastrointestinal and urinary tracts. Screens female patients of reproductive capacity prior to conducting radiographic studies of any kind. Effectively communicates with all members of the health care team.

3. Exercises care and judgment in protecting the patient from unnecessary radiation exposure by formulating optimal exposure factors, utilizing lead-protective shielding and beam-restricting devices as appropriate. Protects himself/herself from radiation exposure by utilizing distance and shielding as appropriate.
4. Moves the x-ray equipment into the proper distance and alignment with the patient and image receptor (film) to obtain the correct images of relevant anatomy. Operates mobile x-ray equipment in the operating room, emergency room, or patient's bedside.
5. Measures patient thicknesses as appropriate to determine the optimal exposure factors to be used. Adjusts the dials, buttons and switches on the control panel which determine the proper amount and energy of the x-ray beam. Activates the x-ray exposure switch. Performs radiographic examinations as directed by a licensed physician.
6. Performs as the technical assistant to the radiologist or other medical specialist during fluoroscopic studies which include the tasks outlined in items 1 through 5 above. Additional duties are carried out as requested by the supervising physician.
7. Prepares medications and contrast media (which increase the visibility of certain internal organs) for patient administration utilizing syringes, needles, vials, ampules, water-soluble iodinated compounds and barium solutions.



**MERCER COUNTY COMMUNITY COLLEGE
MATH, SCIENCE &
HEALTH PROFESSIONS DIVISION**

RADIOGRAPHY PROGRAM
www.mccc.edu/radiography