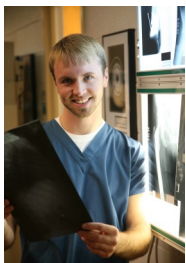


# Medical Radiography

## PROGRAM DESCRIPTION

Medical Radiography is a two-year or three-year program (see reverse) that integrates scientific concepts into working skills through classroom study and intensive clinical experience. The program concentrates on diagnostic radiology, including angiography and computerized tomography. Other imaging modalities such as nuclear medicine, radiation therapy, sonography, and magnetic resonance imaging are briefly discussed.



Medical radiographers are health professionals who combine technical knowledge with radiographic and anatomical knowledge to obtain diagnostic images of all parts of the human body. Successful radiographers must have a good working knowledge of human anatomy, radiographic positioning, radiologic physics, equipment operation, and quality assurance. As members of a health care team, radiographers must also understand and apply principles of good patient care, and conduct themselves in accordance with medical ethical standards.

The Medical Radiography Program is accredited by the Joint Review Committee on Education in Radiologic Technology (JRCERT), 20 N. Wacker Drive, Suite 2850, Chicago, IL 60606-3182. Graduates are eligible to sit for the national certification examination administered by the American Registry of Radiologic Technologists (ARRT), and to apply for Maine licensure in radiography.

## GOALS & LEARNING OUTCOMES

### GOAL #1: STUDENTS WILL DEMONSTRATE CLINICAL COMPETENCE

- Students will demonstrate knowledge of imaging principles – technical selection
- Students will demonstrate competence in positioning skills
- Students will provide patient care essential to medical imaging procedures
- Students will demonstrate radiation protection
- Students will demonstrate competence in routine surgical procedures

### GOAL #2: STUDENTS WILL DEMONSTRATE PROFESSIONALISM

- Students will adhere to all program and clinical affiliate policies
- Students will demonstrate the importance of life-long learning
- Students will demonstrate good attendance and punctuality practices

### GOAL #3: STUDENTS WILL DEMONSTRATE PROBLEM SOLVING AND CRITICAL THINKING SKILLS

- Students will demonstrate the ability to adapt for the trauma patient
- Students will demonstrate the ability to evaluate radiographic images

### GOAL #4: STUDENTS WILL DEMONSTRATE EFFECTIVE COMMUNICATION SKILLS

- Students will communicate effectively in the healthcare community
- Students will demonstrate the ability to convey their ideas using speech, graphics and writing

## PREREQUISITES

**Applications are accepted between September 1, and December 30 each year for fall enrollment. All prerequisites must be completed and documents in prior to February 1.**

**Required:** High school level Algebra I, Algebra II, Geometry, Biology with Lab, and either Physics (preferred) or Chemistry with a lab.

Pre-admission exam (PSB Health Occupations Aptitude Exam—cost \$30).

Attendance at an information session for selected applicants.

Questions about this highly competitive program should be directed to Stacy Green, Director of Admissions, at 207-974-4679 or [sgreen@emcc.edu](mailto:sgreen@emcc.edu).

## CRIMINAL BACKGROUND SCREENING

Individuals offered admission to the Medical Radiography program will be required to submit to a national criminal background screening, at a minimum cost of \$75 (may be higher), within 30 days of acceptance. Applicants who have engaged in any activity or behavior which may be considered abuse, neglect or exploitation of a minor or of an incapacitated or dependent adult, or who has been convicted of any crime involving fraud or dishonesty, or drugs, or for which imprisonment of one year or more has been imposed are urged to seek clarification regarding program completion requirements from the Director of Admissions.



## Programs of Study

Automotive  
Building Construction  
Business Management-Career Option  
Business Management-Transfer Option  
Business Management-Small Business  
Career Studies  
Computer Systems Technology  
Criminal Justice  
Culinary Arts  
Diesel, Truck & Heavy Equipment  
Digital Graphic Design  
Early Childhood Education  
Education-Career & Technical Ed  
Education-Elementary Ed  
Education-Secondary Ed  
Electrical and Automation  
Electricians Technology  
Emergency Medical Services  
Fine Woodworking & Cabinet Making  
Fire Science  
Human Services  
Liberal Studies  
Medical Assistant  
Medical Office-Coding Option  
Medical Office-Health Care Secretary  
Medical Radiography  
Nursing  
Outdoor Recreation & Tourism  
Plumbing  
Refrigeration, Air Conditioning & Heating  
Restaurant & Food Service Management  
Surgical Technology  
Trade & Technical Occupations  
Welding

## Admissions Office—EMCC

354 Hogan Road

Bangor, ME 04401

Phone: 207-974-4680

Toll-Free: 800-286-9357 (in Maine)

FAX: 207-974-4683

Email: [admissions@emcc.edu](mailto:admissions@emcc.edu)

[www.emcc.edu](http://www.emcc.edu)

## 2 year Associate in Science Degree Curriculum

FIRST SEMESTER		CREDITS
BIO 121	Anatomy & Physiology I	3
BIO 124	Anatomy & Physiology I Laboratory	1
MAT 119	College Algebra (may substitute MAT 123)	3
MRT 111	Radiographic Positioning I	3
MRT 117	Radiologic Procedures I	1
MRT 121	Principles of Radiographic Exposure I	2
MRT 131	Medical Terminology	1
MRT 151	Introduction to Health Care	2
MRT 161	Clinical Education I	5
SECOND SEMESTER		CREDITS
BIO 122	Anatomy & Physiology II	3
BIO 126	Anatomy & Physiology II Laboratory	1
ENG 101	College Composition	3
MRT 112	Radiographic Positioning II	3
MRT 118	Radiologic Procedures II	1
MRT 119	Imaging Modalities	1
MRT 122	Principles of Radiographic Exposure II	2
MRT 162	Clinical Education II	5
MRT 164	Advanced Clinical Education <small>(optional)</small>	1
Elective	Any PHI or PSY (100 level or higher)	3
FIRST SUMMER—8 WEEK CLINICAL		CREDITS
MRT 163	Clinical Education III	5
THIRD SEMESTER		CREDITS
BIO 272	Radiation Biology	2
MRT 211	Radiographic Positioning III	1
MRT 251	Advanced Health Care	1
MRT 255	Pathology	1
MRT 267	Clinical Education IV	7
SPE 101	Oral Communication	3
FOURTH SEMESTER		CREDITS
MRT 212	Radiographic Positioning IV	1
MRT 222	Principles of Imaging Physics	1
MRT 230	Radiography Review & Career Planning <small>(optional)</small>	1
MRT 264	Advanced Clinical Education V <small>(optional)</small>	1
MRT 270	Clinical Education V	7
PHY 235	Radiologic Physics	3
Elective	Any SOC/PSY (100 level or higher)	3
<b>TOTAL AS DEGREE CREDITS</b>		<b>78-81</b>



## 3 year Associate in Science Degree Curriculum

FIRST SEMESTER		CREDITS
BIO 121	Anatomy & Physiology I	3
BIO 124	Anatomy & Physiology I Laboratory	1
ENG 101	College Composition	3
MAT 119	College Algebra (may substitute MAT 123)	3
MRT 101	Basic Concepts of Radiography	1
Elective	Any SOC/PSY (100 level or higher)	3
SECOND SEMESTER		CREDITS
BIO 122	Anatomy & Physiology II	3
BIO 126	Anatomy & Physiology II Laboratory	1
MRT 131	Medical Terminology	1
Elective	Any PHI or PSY (100 level or higher)	3
SPE 101	Oral Communication	3
THIRD SEMESTER		CREDITS
MRT 111	Radiographic Positioning I	3
MRT 117	Radiologic Procedures I	1
MRT 121	Principles of Radiographic Exposure I	2
MRT 151	Introduction to Health Care	2
MRT 161	Clinical Education I	5
FOURTH SEMESTER		CREDITS
MRT 112	Radiographic Positioning II	3
MRT 118	Radiologic Procedures II	1
MRT 119	Imaging Modalities	1
MRT 122	Principles of Radiographic Exposure II	2
MRT 162	Clinical Education II	5
MRT 164	Advanced Clinical Education <small>(optional)</small>	1
FIRST SUMMER—8 WEEK CLINICAL		CREDITS
MRT 163	Clinical Education III	5
FIFTH SEMESTER		CREDITS
BIO 272	Radiation Biology	2
MRT 211	Radiographic Positioning III	1
MRT 251	Advanced Health Care	1
MRT 255	Pathology	1
MRT 267	Clinical Education IV	7
SIXTH SEMESTER		CREDITS
MRT 212	Radiographic Positioning IV	1
MRT 222	Principles of Imaging Physics	1
MRT 230	Radiography Review & Career Planning <small>(optional)</small>	1
MRT 264	Advanced Clinical Education V <small>(optional)</small>	1
MRT 270	Clinical Education V	7
MRT 264	Advanced Clinical Education V <small>(optional)</small>	1
PHY 235	Radiologic Physics	3
<b>TOTAL AS DEGREE CREDITS</b>		<b>79-82</b>

A limited number of Extended (3-year) slots are available each year to qualified applicants and may be more suited for some students with minimal transferable credit.

## DID YOU KNOW?

EMCC provides campus housing for over 260 students.

EMCC's Student Success Center offers tutoring services free of charge to our students.

EMCC students enjoy small class sizes, supportive faculty, transferable courses and leadership/engagement opportunities all for under \$4,000 per year  
(most programs, based on 30 credit hours, in-state rate)

Campus tours are available. Call 207-974-4857 or schedule an appointment through our website.

For more information or to apply online, visit us on the web at

[www.emcc.edu](http://www.emcc.edu)

Follow us on social media for the latest EMCC news!



[www.facebook.com/emccbanger](http://www.facebook.com/emccbanger)



@EMCCAdmissions