

MEDICAL IMAGING RADIOGRAPHY, B.S.

Four-Year Medical Imaging Program Admission Requirements

Year One: Applicants must demonstrate unconditional admission into Marshall University. Year One coursework will occur at Marshall University. Upon completion of the Year One curriculum, students can make separate application to SOMI. Admission to the SOMI is limited to 20-25 students. Applicants are ranked by points.

1. ACT score: 21 (additional points are given for ACT scores of 19 or better in math and science)
2. GPA: 2.50 minimum
3. Grade of C or better in:

Code	Title	Credit Hours
BSC 227	Human Anatomy	4
BSC 228 🌿	Human Physiology	4
PHY 101 🌿	Conceptual Physics	3
PHY 101L 🌿	Conceptual Physics Lab	1
CHM 205	General, Organic, and Biochem	3
MTH 121 🌿	Concepts and Applications (CT) (or higher)	3

4. Progression through to Year Four is dependent upon maintaining a minimum GPA of 2.50 and grade of C or better in all Medical Imaging coursework.
5. Negative drug screen and background check. Drug screen and background checks will be conducted at the applicant's expense.

Major

The Core Curriculum is designed to foster critical thinking skills and introduce students to basic domains of thinking that transcend disciplines. The Core applies to all majors. Information on specific classes in the Core can be found at <https://www.marshall.edu/gened/>.

Code	Title	Credit Hours
Core Curriculum		
<i>Core 1: Critical Thinking</i>		
FYS 100	First Yr Sem Critical Thinking	3
MTH 121 🌿	Concepts and Applications (CT)	3
CLS 105 🌿	Medical-Lab Terminology (CT)	3
<i>Core 2</i>		
ENG 101 🌿	Beginning Composition	3
ENG 201 🌿	Advanced Composition	3
CMM 103 🌿	Fund Speech-Communication	3
MTH 121 🌿	Concepts and Applications (CT)	3
BSC 228 🌿	Human Physiology	4
Core II Humanities		3
Core II Social Science		3
Core II Fine Arts		3

Additional University Requirements

Writing Intensive		3
MI 403	Adv Practice Medical Img (recommended)	
Writing Intensive		3
MI 411 🌿	Transcultural Healthcare (recommended)	
Multicultural or International		3
MI 411 🌿	Transcultural Healthcare (recommended)	
Capstone (see advanced modality track)		3

Major-Specific

BSC 227	Human Anatomy	4
BSC 228 🌿	Human Physiology	4
PHY 101 🌿	Conceptual Physics	3
PHY 101L 🌿	Conceptual Physics Lab	1
CLS 105 🌿	Medical-Lab Terminology (CT)	3
MI 201	Intro to Radiography	3
MI 202	Patient Care Img Science	3
MI 204	Radiographic Anatomy	3
MI 206	Clinical Practice I	4
MI 207	Imaging Procedures II	4
MI 208	Pharmacology for Imaging Sci	2
MI 209	Intro to Imaging Equip	3
MI 210	Clinical Practice II	4
MI 211	Seminar Imaging Science	1
MI 212	Seminar Imaging Sciences II	1
Statistics		3

Area of Emphasis-Specific

Additional courses will vary depending on advanced modality track in fourth year.

MI 302	Princ of Radiation Physics	3
MI 303	Image Acquisition	3
MI 304	Radiographic Pathology	3
MI 305	Clinical Practice IV	4
MI 306	Seminar Imaging Science	1
MI 307	Radiobiology	3
MI 308	Rad Image Analysis	2
MI 309	Digital Image Acquisition	2
MI 310	Clinical Practice V	4
MI 311	Seminar Imaging Sciences III	1
MI 321	Imaging Procedures III	4

Advanced Modality Track

In Year 4, students in the radiography area of emphasis must choose one of the four advanced modality tracks:

CT/MRI (27 hours)	27-30
Cardiovascular/Interventional (27 hours)	
Mammography (27 hours)	
Medical Imaging Management (30 hours)	

Major Information

- Students in the Medical Imaging Program must maintain a minimum GPA of 2.50 and receive a grade of C or better in all MI coursework.
- All applicants must meet the professional guidelines established by the ARRT to sit for particular certification examinations.

- By Year 3, students must choose to continue in the radiography area of emphasis or apply to the competitive sonography area of emphasis. This academic map outlines the curriculum for those who choose the radiography area of emphasis.

Areas of Emphasis

- General Sonography, Emphasis (<http://catalog.marshall.edu/undergraduate/programs-az/health-professions/medical-imaging/medical-imaging-radiography-bs/sonography-emphasis/>)
- Medical Imaging, Emphasis - Cardiovascular/Interventional Advanced Practice (<http://catalog.marshall.edu/undergraduate/programs-az/health-professions/medical-imaging/medical-imaging-radiography-bs/emphasis-cardiovascular-advanced-practice/>)
- Medical Imaging, Emphasis - CT Advanced Practice (<http://catalog.marshall.edu/undergraduate/programs-az/health-professions/medical-imaging/medical-imaging-radiography-bs/emphasis-ct-advanced-practice/>)
- Medical Imaging, Emphasis - CT MRI Advanced Practice (<http://catalog.marshall.edu/undergraduate/programs-az/health-professions/medical-imaging/medical-imaging-radiography-bs/emphasis-mri-advanced-practice/>)
- Medical Imaging, Emphasis - Mammography (<http://catalog.marshall.edu/undergraduate/programs-az/health-professions/medical-imaging/medical-imaging-radiography-bs/emphasis-mammography/>)
- Medical Imaging, Emphasis - Medical Imaging Management Advanced Practice (<http://catalog.marshall.edu/undergraduate/programs-az/health-professions/medical-imaging/medical-imaging-radiography-bs/emphasis-management-advanced-practice/>)
- Sonography, Emphasis - Cardiovascular Sonography (<http://catalog.marshall.edu/undergraduate/programs-az/health-professions/medical-imaging/medical-imaging-radiography-bs/sonography-emphasis-cardiovascular/>)
- Sonography, Emphasis - General/OB-GYN (<http://catalog.marshall.edu/undergraduate/programs-az/health-professions/medical-imaging/medical-imaging-radiography-bs/sonography-emphasis-general-ob-gyn/>)
- Sonography, Emphasis - Pediatric/Fetal Echo Electives (<http://catalog.marshall.edu/undergraduate/programs-az/health-professions/medical-imaging/medical-imaging-radiography-bs/sonography-emphasis-pediatric-fetal-echo-electives/>)
- Sonography, Emphasis - Professional Sonographers (<http://catalog.marshall.edu/undergraduate/programs-az/health-professions/medical-imaging/medical-imaging-radiography-bs/sonography-emphasis-professional-sonographers/>)

Four Year Plan

St. Mary's School of Medical Imaging (SOMI) is a hospital-based program, partnered with Marshall University to offer a Bachelor of Science in Medical Imaging. The program curriculum is designed to prepare students to practice radiography/sonography and introduce students to related specialized imaging modalities. The program can be completed in four years. Credentialed Radiographers may enter the professional portion of the program (fourth year) and also obtain the degree.

Course	Title	Credit Hours
First Year		
First Semester		
CMM 103 🌿	Fund Speech-Communication	3
ENG 101 🌿	Beginning Composition	3
MTH 121 🌿	Concepts and Applications (CT)	3
BSC 227	Human Anatomy	4
CLS 105 🌿	Medical-Lab Terminology (CT)	3
UNI 100	Freshman First Class	1
Credit Hours		17
Second Semester		
BSC 228 🌿	Human Physiology	4
ENG 201 🌿	Advanced Composition	3
FYS 100	First Yr Sem Critical Thinking	3
Core II Social Science		3
PHY 101 🌿	Conceptual Physics	3
PHY 101L 🌿	Conceptual Physics Lab	1
Credit Hours		17
Second Year		
First Semester		
MI 201	Intro to Radiography	3
MI 202	Patient Care Img Science	3
MI 204	Radiographic Anatomy	3
MI 205	Imaging Procedures I	4
MI 206	Clinical Practice I	4
MI 211	Seminar Imaging Science	1
Credit Hours		18
Second Semester		
Core II Humanities		3
MI 207	Imaging Procedures II	4
MI 208	Pharmacology for Imaging Sci	2
MI 209	Intro to Imaging Equip	3
MI 210	Clinical Practice II	4
MI 212	Seminar Imaging Sciences II	1
Credit Hours		17
Third Year		
First Semester		
MI 302	Princ of Radiation Physics	3
MI 303	Image Acquisition	3
MI 304	Radiographic Pathology	3
MI 305	Clinical Practice IV	4
MI 306	Seminar Imaging Science	1
MI 321	Imaging Procedures III	4
Credit Hours		18
Second Semester		
MI 307	Radiobiology	3
MI 308	Rad Image Analysis	2
MI 309	Digital Image Acquisition	2
MI 310	Clinical Practice V	4
MI 311	Seminar Imaging Sciences III	1

Statistics	3
Credit Hours	15
Fourth Year	
First Semester	
Core II Fine Arts	3
Advanced Modality Track	13
Credit Hours	16
Second Semester	
Advanced Modality Track	14-17
Credit Hours	14-17
Total Credit Hours	132-135