







MEDICAL IMAGING, B.S.

Students who complete the degree requirements through Marshall University will be granted a Bachelor of Science in Medical Imaging degree once the applicant has fulfilled all requirements from the School of Medical Imaging. Upon graduation students are eligible to sit for the American Registry of Radiologic Technologists (ARRT) certification exam. Applicants for the ARRT Radiography certification exam must graduate with degree from an accredited college/university. The radiography program has a full eight-year accreditation through the Joint Review Committee on Education In Radiologic Technology (JRCERT).

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. GPA: 2.50 minimum
2. Grade of C or better in:

Code	Title	Credit Hours
BSC 227	Human Anatomy	3
BSC 227L	Human Anatomy Lab	1
BSC 228 	Human Physiology	3
BSC 228L 	Human Physiology Lab	1
PHY 101 	Conceptual Physics	3
PHY 101L 	Conceptual Physics Lab	1
MTH 121 	Concepts and Applications (CT) (or higher)	3
CLS 105 	Medical-Lab Terminology (CT)	3


3. 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.
4. Negative drug screen and background check. Drug screen and background checks will be conducted at the applicant's expense.













Course Requirements

 - General Education Course

 - Milestone course: a key success marker for your major. See your advisor to discuss the importance of this course in your plan of study.

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	3
BSC 228L 	Human Physiology Lab	1
Core II Humanities		3
Core II Social Science		3
Core II Fine Arts		3
<i>Additional University Requirements</i>		
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 area of emphasis)		3
Major-Specific		
BSC 227	Human Anatomy	3
BSC 227L	Human Anatomy Lab	1
BSC 228 	Human Physiology	3
BSC 228L 	Human Physiology Lab	1
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 205	Imaging Procedures I	4
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
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	Image Acquisition II	3
MI 310	Clinical Practice V	4
MI 311	Seminar Imaging Sciences III	1
MI 321	Imaging Procedures III	4
Statistics		3

Areas of Emphasis-Specific

In Year 4, students must choose one of the five areas of emphasis:


- Advanced Diagnostic Radiography (<http://catalog.marshall.edu/undergraduate/programs-az/health-professions/medical-imaging/medical-imaging-bs/advanced-diagnostic-radiography-emphasis/>) (31 hours)
- Cardiovascular/Interventional Advanced Practice (<http://catalog.marshall.edu/undergraduate/programs-az/health-professions/medical-imaging/medical-imaging-bs/cardiovascularinterventional-advanced-practice-emphasis/>) (31 hours)
- CT/MRI Advanced Practice Track (<http://catalog.marshall.edu/undergraduate/programs-az/health-professions/medical-imaging/medical-imaging-bs/ct-mri-advanced-practice-emphasis/>) (31-34 hours)
- Mammography (<http://catalog.marshall.edu/undergraduate/programs-az/health-professions/medical-imaging/medical-imaging-bs/mammography-emphasis/>) (31 hours)
- Medical Imaging Management Advanced Practice Track (<http://catalog.marshall.edu/undergraduate/programs-az/health-professions/medical-imaging/medical-imaging-bs/medical-imaging-management-advanced-practice-emphasis/>) (34 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 in Medical Imaging must select an area of emphasis to complete the degree.





Semester 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 Medical Imaging 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.






 - General Education Course

 - Milestone course: a key success marker for your major. See your advisor to discuss the importance of this course in your plan of study.

First Year

First Semester		Credit Hours
BSC 227	Human Anatomy	3
BSC 227L	Human Anatomy Lab	1
CLS 105 	Medical-Lab Terminology (CT)	3
MTH 121 	Concepts and Applications (CT)	3
ENG 101 	Beginning Composition	3
CMM 103 	Fund Speech-Communication	3
UNI 100	Freshman First Class	1
Credit Hours		17

Second Semester

BSC 228 	Human Physiology	3
BSC 228L 	Human Physiology Lab	1
PHY 101 	Conceptual Physics	3
PHY 101L 	Conceptual Physics Lab	1
ENG 201 	Advanced Composition	3
Core II Social Science		3
FYS 100	First Yr Sem Critical Thinking	3
Credit Hours		17

Second Year

First Semester

MI 202	Patient Care Img Science	3
MI 201	Intro to Radiography	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

MI 208	Pharmacology for Imaging Sci	2
MI 209	Intro to Imaging Equip	3
MI 304	Radiographic Pathology	3
MI 207	Imaging Procedures II	4
MI 210	Clinical Practice II	4
MI 212	Seminar Imaging Sciences II	1
Summer		
Statistics		3
Credit Hours		20

Third Year

First Semester

MI 302	Princ of Radiation Physics	3
MI 307	Radiobiology	3
MI 303	Image Acquisition	3
MI 321	Imaging Procedures III	4
MI 305	Clinical Practice IV	4
MI 306	Seminar Imaging Science	1
Credit Hours		18

Second Semester

MI 322	Radiation Safety	3
MI 308	Rad Image Analysis	2
MI 309	Image Acquisition II	3
MI 310	Clinical Practice V	4
MI 311	Seminar Imaging Sciences III	1
Core II Humanities		3
Credit Hours		16

Fourth Year

First Semester

MI 403	Adv Practice Medical Img	3
MI 409	Adv Clinical Practice	4
MI 401	Seminar in Imaging Sci	1
Core II Fine Arts		3

Students take additional courses based on the Area of Emphasis chosen: 3

Advanced Diagnostic Radiography

MI 427 Adv Trauma and Surgical Rad

Cardiovascular/Interventional Advanced Practice

Students who want to gain expertise in Cardiovascular will take MI 434. Students who want to gain expertise in Vascular Interventional will take MI 408.

CT MRI Advanced Practice Track

Students who want to gain expertise in CT will take MI 404. Students who want to gain expertise in MRI will take MI 404 and MI 406.

Mammography

MI 414 Mammography

Medical Imaging Management Advanced Practice Track

MI 412 Radiography Management I

Credit Hours 14

Second Semester

MI 410	Research Medical Imaging	3
MI 411	Transcultural Healthcare	3
MI 426	Advanced Clinical Practice II	4
MI 435	Seminar ARRT Exam Review II	1

Students take additional courses based on the Area of Emphasis chosen: 3-6

Advanced Diagnostic Radiography

MI 429 Geriatric and Pediatric Rad

Cardiovascular/Interventional Advanced Practice

Students who want to gain expertise in Cardiovascular will take MI 407. Students who want to gain expertise in Vascular Interventional will take MI 443.

CT MRI Advanced Practice Track

Students who want to gain expertise in CT will take MI 405. Students who want to gain expertise in MRI will take MI 432.

Mammography

MI 430 Mammography II

Medical Imaging Management Advanced Practice Track

MI 413 Radiography Management II

MI 415 RIS and PACS Principles

Credit Hours 14-17

Total Credit Hours 134-137

- Mammography, Emphasis (<http://catalog.marshall.edu/undergraduate/programs-az/health-professions/medical-imaging/medical-imaging-bs/mammography-emphasis/>)
- Medical Imaging Management Advanced Practice Track, Emphasis (<http://catalog.marshall.edu/undergraduate/programs-az/health-professions/medical-imaging/medical-imaging-bs/medical-imaging-management-advanced-practice-emphasis/>)

- Advanced Diagnostic Radiography, Emphasis (<http://catalog.marshall.edu/undergraduate/programs-az/health-professions/medical-imaging/medical-imaging-bs/advanced-diagnostic-radiography-emphasis/>)
- Cardiovascular/Interventional Advanced Practice, Emphasis (<http://catalog.marshall.edu/undergraduate/programs-az/health-professions/medical-imaging/medical-imaging-bs/cardiovascularinterventional-advanced-practice-emphasis/>)
- CT MRI Advanced Practice Track, Emphasis (<http://catalog.marshall.edu/undergraduate/programs-az/health-professions/medical-imaging/medical-imaging-bs/ct-mri-advanced-practice-emphasis/>)