

Students in the SOMI have several choices regarding curriculum tracks. All sophomore (year 2) students follow the same curriculum. At the end of the sophomore year, students may elect to continue in the radiography track or apply to the sonography track. Sonography will be limited enrollment and selection criteria is primarily based on MI coursework GPA. In the event of a tie, MU science courses and MU GPA will be used as the determining factor. Senior students (year 4) in either sonography or radiography have additional options. Radiography students will select from one of five advanced modality tracks. Sonography will select ABD/OB-GYN or Vascular/Echo. General Education requirements from Marshall University may change. Students should consult with the College of Health Professions at MU to determine any general education requirements. Students are required to complete both MU and SMMC graduation requirements prior to receiving their certificate from SMMC. After January 2015, applicants to the ARRT certification exam must also have the minimum of an AAS degree. The BS degree also meets an ARDMS requirement. Registered technologists wishing to complete the BSMI degree may enter the program in the fourth year.

### **BS MI Core Curriculum: General Ed requirements in (red) Program prerequisites in (blue)**

Year 1 Fall		Year 1 Spring	
Course	Credit	Course	Credit
BSC 227 Human Anatomy	4	BSC 228 Human Physiology (Nat science)	4
Communication: Course	3	PHY 101 Conceptual Physics	3
Medical Terminology (CT)	3	PHY 101L Conceptual physics lab	1
ENG 101 English Composition I (or equivalent) (composition)	3	Social Science Course	3
MTH 121 or higher NOT MTH 125 (mathematics)	3	FYS 100 First Yr Sem Critical Thinking	3
		Composition: English 201	3
Total	16	Total	17

### **Admission to MI program between year 1 and 2**

Year 2 Fall		Year 2 Spring	
MI 201 Introduction to Radiography	3	MI 207 Imaging Procedures II	4
MI 202 Patient Care in Imaging Science	3	MI 208 Pharmacology for Imaging Science	2
MI 204 Radiographic Anatomy	3	MI 209 Intro to Imaging Equip	3
MI 205 Imaging Procedures I	4	MI 210 Clinical Practice II	4

MI 206 Clinical Practice I	4	MI 212 Seminar in Imaging Science	1
MI 211 Seminar Imaging Science	1	<b>Humanities Course</b>	3
Total	18	Total	17
Summer Clinical Elective for radiography or sonography			
MI 213	4		
Total	4		

## Radiography

Year 3 Fall		Year 3 Spring	
MI 302 Princ of Radiation Physics	3	MI 307 Rad Protection	3
MI 303 Image Acquisition	3	MI 308 Rad Image Analysis	2
MI 304 Radiographic Pathology	3	MI 309 Digital Image Acquisition	2
MI 305 Clinical Practice IV	4	MI 310 Clinical Practice V	4
MI 306 Seminar Imaging Sciences	1	MI 311 Seminar Imaging Sciences	1
MI 321 Procedures III	3	<b>Statistics</b>	3
Total	17	Total	15
Summer Clinical Elective for radiography or sonography			
MI 320	4		
Total	4		

**Year 4 Radiography Professional Level: Students will select one of the following areas of emphasis**

**Computed Tomography/Magnetic Resonance Imaging,  
Cardiovascular/Interventional, Mammography or Management**

### CT/MRI Elective Track

Year 4 Fall		Year 4 Spring	
MI 402 Quality Management	3	MI 401 Seminar in Imaging Sci	1

MI 403 Adv Practice Medical Img (Writing intensive)	3	MI 404 Advanced Sectional Anatomy	3
MI 405 CT Equip and Proc or MI 406 MRI Equip and Proc	3	MI 410 Research Medical Imaging (Capstone)	3
MI 409 Adv Clinic I	4	"MI 411 Transcultural Healthcare (Writing intensive, multicultural)"	3
MI 428 Forensic Radiography (Elective)	3	MI 426 Adv Clinical Practice II	4
Fine arts	3		
Total	16-19	Total	14

### Cardiovascular/Interventional Radiology Track

Fall		Spring	
MI 402 Quality Management	3	MI 401 Seminar in Imaging Sci	1
MI 403 Adv Practice Medical Img (Writing intensive)	3	MI 407 Cardiovascular Anatomy	3
MI 408 Cardiovascular Imaging	3	MI 410 Research Medical Imaging (Capstone)	3
MI 409 Adv Clinical Practice I	4	"MI 411 Transcultural Healthcare (Writing intensive, multicultural)"	3
MI 428 Forensic Radiography (Elective)	3	MI 426 Adv Clinical Practice II	4
Fine arts	3		
Total	16-19	Total	14

### Mammography Track

Fall**		Spring	
MI 402 Quality Management	3	MI 401 Seminar in Imaging Sci	1
MI 403 Adv Practice Medical Img (Writing intensive)	3	MI 410 Research Medical Imaging (Capstone)	3
MI 414 Mammography I	3	"MI 411 Transcultural Healthcare (Writing intensive, multicultural)"	3
MI 409 Adv Clinical Practice I	4	MI 426 Adv Clinical Practice II	4
MI 428 Forensic Radiography (Elective)	3	MI 430 Mammography II	3
Fine arts	3		
Total	16-19	Total	14

## Adv Diagnostic Rad

Fall		Spring	
MI 402 Quality Management	3	MI 401 Seminar in Imaging Sci	1
MI 403 Adv Practice Medical Img (Writing intensive)	3	MI 410 Research Medical Imaging (Capstone)	3
MI 409 Adv Clinical Practice	4	"MI 411 Transcultural Healthcare (Writing intensive, multicultural)"	3
MI 427 Adv Trauma-Surgical Radiography	3	MI 426 Adv Clinical Practice II	4
MI 428 Forensic Radiography (Elective)	3	MI 429 Geriatric/Pediatric Radiography	3
Fine arts	3		
Total	16-19		14

**YEAR Three SONOGRAPHY Students may select General Sonography or Cardiovascular Sonography area of emphasis by the spring semester of the junior year**

Fall (General Sonography)		Spring (General Sonography)	
MI 312 Abdominal Sonography I	4	MI 416 Obstetrical sonography I	3
MI 313 Ultrasound Physics I	3	MI 316 Abdominal Sonography II	3
MI 314 Clinical Practice I Sonography	4	MI 317 Ultrasound Physics II	3
MI 318 Vascular I	3	MI 319 Clinical Practice II Sonography	4
MI 306 Seminar Imaging Science	1	MI 311 Seminar Imaging Science	1
MI 315 Small Parts	3	Statistics	3
Total	18	Total	17

### Year Three Cardiovascular

		Spring (Cardiovascular)	
MI 312 Abdominal Sonography I	4	MI 316 Abdominal Sonography II	3
MI 313 Ultrasound Physics I	3	MI 317 Ultrasound Physics II	3
MI 314 Clinical Practice I Sonography	4	MI 319 Clinical Practice II Sonography	4
MI 318 Vascular I	3	MI 311 Seminar Imaging Science	1
MI 306 Seminar Imaging Science	1	MI 424 Vascular II	3
MI 315 Small Parts	3	MI 407 Cardiovascular anatomy	3
Statistics	3		
Total	18-21		17

### Year Four

#### General Sonography Track

Fall		Spring	
MI 403 Adv Practice Med Imaging (WAC)	3	MI 410 Research Medical Imag (Capstone)	3
MI 420 Obstetrical Sonography II	2	MI 411 Transcultural Healthcare (WAC/MC)	3
MI 417 Gynecological Sonography I	3	MI 421 Gynecological Sonography II	2
MI 419 Clinical Practice III Sonography	4	MI 422 Clinical Practice IV Sonography	4
Fine arts	3	MI 401 Registry Review	1

Total	15	Total	13
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### Cardiovascular Sonography Track

Fall		Spring	
MI 403 Adv Practice Med Imaging (WAC)	3	MI 410 Research Medical Imag (Capstone)	3
MI 419 Clinical Practice III Sonography	4	MI 411 Transcultural Healthcare (WAC/MC)	3
MI 423 Echosonography I	3	MI 407 Cardiovascular Anatomy	3
MI 428 Forensic Radiography (Elective)	3	MI 401 Registry Review	1
<b>Fine arts</b>	3	MI 422 Clinical Practice IV Sonography	4
		MI 425 Echosonography II	3
Total	13-16	Total	17

### Summer Clinical Elective for radiography or sonography

MI 431	4		
Total	4		