

# MEDICAL IMAGING RADIOGRAPHY

## REQUIREMENTS

**CORE CURRICULUM** 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 [marshall.edu/gened](http://marshall.edu/gened).

### CORE 1: CRITICAL THINKING

CODE	COURSE NAME	HRS	GRADE
FYS 100	First Year Seminar in Crit Thinking	3	_____
MTH 121	Critical Thinking Course	3	_____
CLS 105	Critical Thinking Course	3	_____

### CORE 2:

CODE	COURSE NAME	HRS	GRADE
ENG 101	Beginning Composition	3	_____
ENG 201	Advanced Composition	3	_____
CMM 103	Fund Speech-Communication	3	_____

### Additional University Requirements

_____	Writing Intensive (MI 403 rec.)	3	_____
_____	Writing Intensive (MI 411 rec.)	3	_____
_____	Multicult or Internat (MI 411 rec.)	3	_____
_____	Capstone (see advanced modailty track)	3	_____

MTH 121	Concepts and Applications (CT)	3	_____
BSC 228	Human Physiology	4	_____
_____	Core II Humanities	3	_____
_____	Core II Soc Sci	3	_____
_____	Core II Fine Arts	3	_____

## MAJOR-SPECIFIC

All Medical Imaging majors are required to take the following courses:

CODE	COURSE NAME	HRS	GRADE	CODE	COURSE NAME	HRS	GRADE
BSC 227	Human Anatomy	4	_____	MI 206	Clinical Practice I	4	_____
BSC 228	Human Physiology	4	_____	MI 207	Imaging Procedures II	4	_____
PHY 101	Concepts of Physics	3	_____	MI 208	Pharm & Drug Admin for Imag Sci	2	_____
PHY 101L	Concepts of Physics Lab	1	_____	MI 209	Intro to Imaging Equipment	3	_____
CLS 105	Med Term & Intro to Lab Med (CT)	3	_____	MI 210	Clinical Practice II	4	_____
MI 201	Intro to Radiography	3	_____	MI 211	Seminar in Imaging Science	1	_____
MI 202	Patient Care in Imag Science	3	_____	MI 212	Seminar in Imaging Science II	1	_____
MI 204	Radiographic Anatomy	3	_____	_____	Statistics	3	_____

## AREA OF EMPHASIS

All Medical Imaging majors pursuing the radiography area of emphasis are required to take the following courses (additional courses will vary depending on advanced modality track in fourth year):

CODE	COURSE NAME	HRS	GRADE	CODE	COURSE NAME	HRS	GRADE
MI 302	Principles of Radiation Physics	3	_____	MI 308	Rad Image Analysis	2	_____
MI 303	Image Acquisition	3	_____	MI 309	Digital Image Acquisition	2	_____
MI 304	Radiographic Pathology	3	_____	MI 310	Clinical Practice V	4	_____
MI 305	Clinical Practice IV	4	_____	MI 311	Seminar Imaging Sciences	1	_____
MI 306	Seminar Imaging Science	1	_____	MI 321	Procedures III	3	_____
MI 307	Rad Protection	3	_____	varies	Advanced Modality Track	27-30	_____

## 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.
- In Year 4, students in the radiography area of emphasis must choose one of the following four advanced modality tracks:
  - CT/MRI (27 hours): MI 401, 402, 403, 404, 405 (or 3 hrs. 406), 409, 410, 411, 415, ACLS certification
  - Cardiovascular/Interventional (27 hours): MI 401, 402, 403, 407, 408, 409, 410, 411, 426, ACLS certification
  - Mammography (27 hours): MI 401, 402, 403, 409, 410, 411, 414, 426, 430, ACLS certification
  - Medical Imaging Management (30 hours): MI 401, 402, 403, 409, 410, 411, 412, 413, 415, 426

# MEDICAL IMAGING RADIOGRAPHY

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.

YEAR ONE	FALL SEMESTER				SPRING SEMESTER			
	CODE	COURSE NAME	HRS	GRADE	CODE	COURSE NAME	HRS	GRADE
	CMM 103	Fund Speech Communication	3	_____	BSC 228	Human Physiology	4	_____
	ENG 101	Beginning Composition	3	_____	ENG 201	Advanced Composition	3	_____
	MTH 121	Concepts and Applications (CT)	3	_____	FYS 100	First Year Seminar in Crit Thinking	3	_____
	BSC 227	Human Anatomy	4	_____	_____	Core II Social Sci	3	_____
	CLS 105	Med Term & Intro to Lab Med (CT)	3	_____	PHY 101	Concepts of Physics	3	_____
	UNI 100	Freshman First Class	1	_____	PHY 101L	Concepts of Physics Lab	1	_____
	<b>TOTAL HOURS</b>		<b>17</b>		<b>TOTAL HOURS</b>		<b>17</b>	
	Summer Term (optional):							

YEAR TWO	FALL SEMESTER				SPRING SEMESTER			
	CODE	COURSE NAME	HRS	GRADE	CODE	COURSE NAME	HRS	GRADE
	MI 201	Intro to Radiography	3	_____	_____	Core II Humanities	3	_____
	MI 202	Patient Care in Imaging Science	3	_____	MI 207	Imaging Procedures II	4	_____
	MI 204	Radiographic Anatomy	3	_____	MI 208	Pharm & Drug Admin for Imag Sci	2	_____
	MI 205	Imaging Procedures I	4	_____	MI 209	Intro to Imaging Equipment	3	_____
	MI 206	Clinical Practice I	4	_____	MI 210	Clinical Practice II	4	_____
	MI 211	Seminar in Imaging Science	1	_____	MI 212	Seminar in Imaging Science II	1	_____
	<b>TOTAL HOURS</b>		<b>18</b>		<b>TOTAL HOURS</b>		<b>17</b>	
	Summer Term (optional):							

YEAR THREE	FALL SEMESTER				SPRING SEMESTER			
	CODE	COURSE NAME	HRS	GRADE	CODE	COURSE NAME	HRS	GRADE
	MI 302	Principles 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 Science	1	_____	MI 311	Seminar Imaging Sciences	1	_____
	MI 321	Procedures III	3	_____	_____	Statistics	3	_____
	<b>TOTAL HOURS</b>		<b>17</b>		<b>TOTAL HOURS</b>		<b>15</b>	
	Summer Term (optional):							

YEAR FOUR	FALL SEMESTER				SPRING SEMESTER			
	CODE	COURSE NAME	HRS	GRADE	CODE	COURSE NAME	HRS	GRADE
	_____	Core II Fine Arts	3	_____	_____	Advanced Modality Track	14-17	_____
	_____	Advanced Modality Track	13	_____				
	<b>TOTAL HOURS</b>		<b>16</b>		<b>TOTAL HOURS</b>		<b>14-17</b>	
	Summer Term (optional):							

Area of Emphasis

Major Requirement

General Education Requirement

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

Area of Emphasis

Major Requirement

General Education Requirement

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

## INVOLVEMENT OPPORTUNITIES

- Student Government Association
- Campus Activity Board
- JMELI
- Commuter Student Advisory Board
- Club Sports
- Religious Organizations
- Political Organizations
- Residence Hall Association
- Cultural Organizations
- National Society of Leadership and Success
- Greek Life

## RELATED MAJORS

- Clinical Laboratory Science
- Respiratory Therapy
- Physics
- Pre-Medicine
- Health Sciences
- Healthcare Management

## GRADUATION REQUIREMENTS

- Have a minimum of 120 credit hours (some colleges or majors require more);
- Have an overall and Marshall Grade Point Average of 2.00 or higher;
- Have an overall Grade Point Average of 2.00 or higher in the major area of study;
- Have earned a grade of C or better in English 201 or 201 H;
- Have met all major(s) and college requirements;
- Have met the requirements of the Core Curriculum;
- Have met the residence requirements of Marshall University, including 12 hours of 300/400 level coursework in the student's college (see section entitled "Residence Requirements" in the undergraduate catalogue);
- Be enrolled at Marshall at least one semester of the senior year;
- Have transferred no more than 72 credit hours from an accredited West Virginia two-year institution of higher education.

Colleges and specific programs may have unique requirements that are more stringent than those noted above. Students are responsible for staying informed about and ensuring that they meet the requirements for graduation.

This academic map is to be used as a guide in planning your coursework toward a degree. Due to the complexities of degree programs, it is unfortunate but inevitable that an error may occur in the creation of this document. The official source of degree requirements at Marshall University is DegreeWorks available in your myMU portal. Always consult regularly with your advisor.

# MEDICAL IMAGING - RADIOGRAPHY – 2020-2021

## YEAR ONE



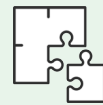
Have questions? Need to talk? You already have a Friend-At-Marshall ready to help you succeed. Find your FAM Peer Mentor here: [www.marshall.edu/fam](http://www.marshall.edu/fam)



Stay on the Herd Path and come to class! Class attendance is more important to your success than your high school GPA, your class standing, or your ACT/SAT scores.



Take a pulse check. Know what you need to do every year to keep your grants, scholarships, or federal financial aid.



Meet with a career education specialist to conduct a "gap analysis." Figure out the skills you'll need for the career you want while you still have time to build them.



Take a Community Based Learning (CBL) class that connects course content to the community. Stay engaged and make a difference.



Select your core curriculum courses carefully so that each course meets more than one requirement (e.g. writing intensive, critical thinking, multicultural).



Take a career self-assessment to help determine what majors fit your talents and interests.

## YEAR THREE



Networking is key! Attend a Career Expo to seek employment opportunities and network with employers in your field.



Think about who can help you grow as a student and a professional (professors, advisors, alumni, etc.) and ask at least one to be your mentor.



Are you on track to graduate? Meet with your advisor for your Junior Eval to make sure you know what requirements you have left.



Join professional associations in your field, like: ASRT, SDMS, WVSRT.



In order to work in your field, you need to take a primary pathway certification exam. Talk with your advisor and develop a study strategy now.



Have you decided which advance modality track to pursue during your senior year? Talk to your advisor now.



Be at the top of your professional game! Prepare a final resume and practice your interview skills with a career coach in Career Education.

## YEAR TWO



Have you finished your university core curriculum requirements? If not, use the summer term before Sophomore Year to get back on track before beginning your Medical Imaging core.



Develop relationships with professors who can serve as future references by attending their office hours.



Meet with a career education specialist to conduct a "gap analysis." Figure out the skills you'll need for the career you want while you still have time to build them.



Join professional associations in your field, like: ASRT, SDMS, WVSRT.



Volunteer for health-related organizations, such as hospitals or long term care facilities.



Take a pulse check. Know what you need to do every year to keep your grants, scholarships, or federal financial aid.



Have you decided which Area of Emphasis to pursue? If you're interested in Sonography, you'll need to apply at the end of your sophomore year.

## YEAR FOUR



This is it! Are you on track to graduate? Meet with your advisor for your Senior Eval to see what requirements you have left.



Think about who can help you grow as a student and a professional (professors, advisors, alumni, etc.) and ask at least one to be your mentor.



In order to work in your field, you need to take a primary pathway certification exam. Talk with your advisor and develop a study strategy now.



Be at the top of your professional game! Prepare a final resume and practice your interview skills with a career coach in Career Education.



Talk to faculty about also pursuing optional professional certifications (postprimary pathways in specialized subfields).



Want to continue your education and increase your opportunities? Talk to a faculty member about whether graduate school fits your career goals.



Join professional associations in your field, like: ASRT, SDMS, WVSRT.

## TRANSFERABLE SKILLS ASSOCIATED WITH THIS MAJOR

- Empathy
- Effective Oral Communication Skills
- Evaluation and Assessment
- Computer Technology Skills
- Adaptability in High Stress Environment
- Technical Writing Skills
- Ability to Work Independently
- Knowledge of Medical Equipment

## ASSOCIATED CAREERS

- Radiologic Technologist
- Mammographer
- Cardiac/Interventional Radiologist
- MRI Technologist
- Cardiovascular Technologist
- Radiology Administrator
- Sonographer
- Medical and Health Services Manager



Marshall University  
College of Health Professions  
1 John Marshall Drive  
Huntington, WV 25755  
1-304-696-2624  
[cohpc@marshall.edu](mailto:cohpc@marshall.edu)  
[marshall.edu/cohpc](http://marshall.edu/cohpc)