CT MRI ADVANCED PRACTICE TRACK, EMPHASIS

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		
Core 1: Critical Thinking		
FYS 100	First Yr Sem Critical Thinking	3
MTH 121	Concepts and Applications (CT)	3
CLS 105	Medical-Lab Terminology (CT)	3
Core 2		
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
Additional University Requirements		
Writing Intensive		3
MI 403	Adv Practice Medical Img	
Writing Intensive		3
MI 411	Transcultural Healthcare	
Multicultural or International		3
MI 411	Transcultural Healthcare	
Capstone (see advanced modality track)		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
Statistics		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

In Year 4, students choose an area of emphasis. Below are Year 4 course requirements for the CT MRI Advanced Practice Track area of emphasis:

Code	Title	Credit Hours
All students will take the following courses:		
MI 401	Seminar in Imaging Sci	1
MI 403	Adv Practice Medical Img	3
MI 404	Adv Sectional Anatomy	3
MI 409	Adv Clinical Practice	4
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 who want to gain expertise in CT will also take: [1]		
MI 405	CT Procedures	
Students who want to gain expertise in CT will also take: [1]		
MI 406	MRI Procedures	
MI 432	Advanced MRI Theory	

[1] Students may take MI 405 (for expertise in CT) or take both MI 406 and MI 432 (for expertise in MRI).

Semester Plan

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
Core II Fine Arts		3
MI 409	Adv Clinical Practice	4
MI 401	Seminar in Imaging Sci	1
Students who want to gain expertise in CT will also take MI 404. Students who want to gain expertise in MRI will take MI 404 AND MI 406. [1]		3-6
	Credit Hours	**14-17**
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
MI 405 or MI 432	CT Procedures [2] or Advanced MRI Theory	3
	Credit Hours	**14**
	Total Credit Hours	**134-137**

[1] All students take MI 404. To gain expertise in MRI, also take MI 406.
[2] To gain expertise in CT, select MI 405. To gain expertise in MRI, select MI 432.