

Curriculum for B.S. Degree, Major in Physics, Area of Emphasis Medical Imaging:

		Total Hours = 118				
Required Courses:						
PHY 211	University Physics 1	4		MI 201	Intro to Radiography	3
PHY 202	General Physics 1 Lab	1		MI 202	Patient Care in Imaging	3
PHY 213	University Physics 2	4		MI 204	Radiographic Anatomy	3
PHY 204	General Physics 2 Lab	1		MI 205	Imaging Procedures I	4
PHY 320	Intro Modern Physics	3		MI 206	Clinical Practice I	4
PHY 421	Modern Physics Lab	2		MI 207	Imaging Procedures II	4
PHY 445	Math Methods	3		MI 208	Pharm & Drug Admin	2
PHY 446	Math Methods 2	3		MI 210	Clinical Practice II	4
PHY 300	Electricity & Magnetism 1	3				
PHY 302	Electricity & Magnetism 2	3		MTH 229	Calculus 1 (CT)	5
PHY 304	Optics	3		MTH 230	Calculus 2	4
PHY 405	Optics Lab	2		MTH 231	Calculus 3	4
PHY 308	Thermal Physics	3		STA 345	Probability & Statistics	3
PHY 330	Mechanics	3				
PHY 442	Quantum Mechanics 1	3		BSC 227	Human Anatomy	4
PHY 360	Medical Physics	3		BSC 228	Human Physiology	4
or	PHY 491	Capstone	2			
	PHY 492	Capstone				
	FYS 100	First Year Seminar	3		Math (in major)	
	ENG 101	Beginning Composition	3		PS or NS (in major)	
	ENG 201	Advanced Composition	3		(1 more CT)	
	CMM 207	Bus. & Prof. Communication	3		(2 writing intensive)	
	SS	Social Science	3		(1 International)	
	HU	Humanity	3			
	FA	Fine Art	3			

B.S. Degree, Major in Physics, Area of Emphasis Medical Imaging

Designed for those who are interested in future study or work in medical imaging or medical physics. Students are strongly urged to simultaneously pursue the B.S. Degree, Major in Medical Imaging, Area of Emphasis Physics.

1. Physics 211 and 202, 213 and 204
2. Biology 227 and 228, fulfilling the COS requirements
3. Physics 300, 302, 304, 308, 320, 330, 360, 405, 421, 442, 445, 446, and Physics 491/492 (capstone)
4. Medical Imaging 201, 202, 204, 205, 206, 207, 208, and 210
5. Mathematics 229, 230, and 231, and Statistics 345

Sample Plan:

First Year, Fall			First Year, Spring		
PHY 211	University Physics 1	4	PHY 213	University Physics 2	4
PHY 202	General Physics 1 Lab	1	PHY 204	General Physics 2 Lab	1
MTH 229	Calculus 1 (CT)	5	MTH 230	Calculus 2	4
ENG 101	Freshman Composition	3	ENG 201	Freshman Composition	3
FYS 100	First Year Seminar	3	Social Science		3
Total		16	Total		15
Second Year, Fall			Second Year, Spring		
PHY 320	Modern Physics	3	PHY 304	Optics	3
PHY 421	Modern Physics Lab	2	PHY 405	Optics Lab	2
MTH 231	Calculus 3	4	STA 345	Prob & Stats	3
BSC 227	Human Anatomy	4	BSC 228	Human Physiology	4
Fine Arts		3	Humanities		3
Total		16	Total		15
Third Year, Fall			Third Year, Spring		
MI 201	Intro to Radiography	3	MI 207	Imaging Procedures II	4
MI 202	Patient Care in Imaging	3	MI 208	Pharm & Drug Admin	2
MI 204	Radiographic Anatomy	3	PHY 330	Mechanics	3
MI 205	Imaging Procedures I	4	PHY 308	Thermal Physics	3
Total		13	PHY 360	Medical Physics	3
Total		13	Total		15
Fourth Year, Fall			Fourth Year, Spring		
MI 206	Clinical Practice I	4	PHY 302	Electricity and Magnetism 2	3
PHY 300	Electricity and Magnetism 1	3	PHY 492	Capstone	2
PHY 442	Quantum 1	3	MI 210	Clinical Practice II	4
PHY 445	Math Methods 1	3	CMM 207	Communication	3
Total		13	PHY 446	Math Methods 2	3
Total		13	Total		15