ACCELERATED PLAN

Bachelor of Science in Biomedical Physics (BS) to Master of Science in Medical Physics (MS)

FALL COURSES	CREDITS	SPRING COURSES	CREDITS	SUMMER, TRANSFER AND PRE-CU COURSES	CREDITS
RSP: Intro to Collegiate Life	0.5	RSP: Intro to Collegiate Life	0.5		
Critical Issues	3	Composition	3		
Oral Communications	1	Philosophical Ideas	3		
General Physics I (PHY 213 -***OR***- 221)	3	General Physics II (PHY 214 -***OR***- 222)	3		
General Physics Lab (PHY 205 -***OR***- PHY 223)	1	General Physics Lab (PHY 206 -***OR***- PHY 224)	1		
MTH 245 Calculus I	4	CHM 205 General Chemistry II	3		
CHM 203 General Chemistry I	3	CHM 206 General Chemistry Lab II	1		
CHM 204 General Chemistry Lab I	1	MTH 246 Calculus II	4		
TERM SUBTOTAL:	**16.5**	**TERM SUBTOTAL:**	**18.5**		
		Biblical Traditions	3		
		Understanding Social Science	3		
Christian Tradition	3	PHY 471 Classical Mechanics	3		
Global Perspectives	3	PHY 497 Directed Independent Research	3		
BIO 201 General Biology I	3	BIO 202 General Biology II	3		
BIO 205 General Biology I Lab	1	BIO 206 General Biology II Lab	1		
MTH 347 Calculus III	3	MTH 350 Applied Linear Algebra and Differential Equations	3		
PHY 301 Modern Physics	3				
PHY 397 Research Methods	2				
TERM SUBTOTAL	**18**	**TERM SUBTOTAL:**	**19**		
Doing Social Science	3				
BIO 333 Comparative Vertebrate Anatomy	3	Ethics	3		
PHY 303 Electronics Lab	1	Fine Arts	3		
PHY 531 Quantum Mechanics	3	PHY 481 Electricity and Magnetism -***OR***- Elective	3		
PHY 541 Thermo and Stat Mech -***OR***- Elective	3	PHY 351 Physics in Medicine -***OR***- PHY 353 Intro to Biological Physics	3		
PHY Elective	3	PHY 449 Animal Physiology	4		
TERM SUBTOTAL:	**16**	**TERM SUBTOTAL:**	**16**		
Literature	3	Ultimate Questions	3		
Foreign Language	4	PHY 499 Research Capstone	1		
Intersections	3	PHY 553 -and- 662 -***OR***- PHY 561 -***AND***- 566**	6		
PHY 491 Seminar	1	PHY 792 Medical Physics Seminar	1	PHY 798 Medical Physics Clinical Rotation	3
PHY 567 -***AND***- 661 -***OR***- PHY 562 -***AND***- 565*	6	Electives	5		
TERM SUBTOTAL:	**17**	**TERM SUBTOTAL:**	**16**	**TERM SUBTOTAL:**	**3**
PHY 567 -***AND***- 661 -***OR***- PHY 562 -***AND***- 565*	6	PHY 553 -***AND***- 662 -***OR***- PHY 561 -***AND***- 566**	6		
PHY 797 Directed Independent Research	2	PHY 792 Medical Physics Seminar	1		
PHY 799 Master's Thesis	2	PHY 799 Master's Thesis	4		
TERM SUBTOTAL:	**10**	**TERM SUBTOTAL:**	**11**		

GRAND TOTAL: 161

116 Undergraduate + 43 Graduate Credit Hours

18 credit hours used by both BA and MS Degree

ACCELERATED PLAN

Bachelor of Science in Biomedical Physics (BS) to Master of Science in Medical Physics (MS)

CORE REQUIREMENTS	CREDITS	COURSES IN MAJOR THAT SATISFY THE CORE REQUIREMENT
MAGIS CORE—FOUNDATIONS		
Composition	3	
Critical Issues*	3	
Oral Communication	1	
Math Reasoning	2	MTH 245 Calculus I
Philosophical Ideas	3	
Christian Tradition	3	
MAGIS CORE—EXPLORATIONS		
Understanding Natural Science	4	General Physics I (PHY 213 ***-OR-*** PHY 221)
Understanding Social Science	3	
Global Perspectives	3	
Literature	3	
Ethics	3	
Biblical Tradition	3	
Fine Arts	3	
Foreign Language	4	
MAGIS CORE—INTEGRATIONS		
Intersections	3	
Doing Natural Science	4	General Physics with Lab II (PHY 206 ***-OR-*** PHY 224)
Doing Social Science	3	
Ultimate Questions	3	
DESIGNATED COURSES		
Oral Communication		PHY 491 Seminar
Written Communication		PHY 499 Research Capstone
Statistical Reasoning		PHY 397 Research Methods
Ethics		PHY 491 Seminar
Technology		PHY 499 Research Capstone

MAJOR	CREDITS
General Physics I (PHY 213 ***-OR-*** 221)	3
General Physics Lab I (PHY 205 ***-OR-*** PHY 223)	1
General Physics II (PHY 214 ***-OR-*** 222)	3
General Physics Lab II (PHY 206 ***-OR-*** PHY 224)	1
PHY 301 Modern Physics	3
PHY 303 Electronics Lab ***-OR-*** Elective	1
PHY 351 Physics in Medicine ***-OR-*** PHY 353 Intro to Biological Physics	3
PHY 397 Research Methods	2
PHY 471 Classical Mechanics	3
PHY 497 Directed Independent Research	1
PHY 481 Electricity and Magnetism ***-OR-*** Elective	3
PHY 499 Research Capstone	1
PHY 531 Quantum Mechanics	3
PHY 541 Thermo and Stat Mech ***-OR-*** Elective	3
PHY 553 Computational Physics	3
PHY 561 Nuclear Physics	3
PHY 562 Nuclear Instruments/ Methods Lab	2
PHY 565 Radiation Biophysics	3
PHY 566 Physics of Medical Imaging I	3
PHY 567 Physics of Medical Imaging II	3
MTH 245 Calculus I	4
MTH 246 Calculus II	4
MTH 347 Calculus III	3
MTH 350 Applied Linear Algebra and Differential Equations	3
CHM 203 General Chemistry I	3
CHM 204 General Chemistry Lab I	1
CHM 205 General Chemistry II	3
CHM 206 General Chemistry Lab II	1
BIO 201 General Biology I	1
BIO 205 General Biology Lab I	3
BIO 202 General Biology II	1
BIO 206 General Biology Lab II	3
BIO 333 Comparative Vertebrate Anatomy	3
BIO 449 Animal Physiology	4

Masters classes shown in **LIGHT BLUE** will be taken while an undergraduate student. Masters classes shown in **GRAY** will be taken while a graduate student.

OTHER NOTES

This plan is an example of Creighton's **Accelerated Bachelor's to Master's program** and how one might accomplish this path. Please note, each student will have a unique background and set of circumstances that must be considered in their plan.

Students will complete six (6) credit hours based on the identified courses offered per semester:
*PHY 567 Physics of Medical Imaging II ***-AND-*** PHY 661 Physics of Radiation Therapy
-OR- PHY 562 Nuclear Instruments and Methods Lab ***-AND-*** PHY 565 Radiation Biophysics

PHY 553 Computational Physics *-AND-*** PHY 662 Dosimetry and Radiation Protection
-OR- PHY 561 Nuclear Physics ***-AND-*** PHY 566 Physics of Medical Imaging I

FOR MORE INFORMATION
Michael Nichols, PhD | 402.280.2159 | *MNichols@creighton.edu*

Creighton UNIVERSITY
Graduate School