



## ACCELERATED PLAN

# Bachelor of Science in Physics (BS) to Master of Science in Physics (MS)

FALL COURSES	CREDITS	SPRING COURSES	CREDITS	SUMMER COURSE	CREDITS
RSP: Intro to Collegiate Life	0.5	RSP: Intro to Collegiate Life	0.5		
Composition	3	Oral Communications	1		
General Physics I		Critical Issues	3		
(PHY 213 -OR- 221)	3	Philosophical Ideas	3		
General Physics I Lab	1	General Physics II			
(PHY 205 -OR- PHY 223)		(PHY 214 -OR- 222)	3		
MTH 245 Calculus I	4	General Physics II Lab	1		
Elective/Minor Credit	3	(PHY 206 -OR- PHY 224)			
<b>TERM SUBTOTAL:</b>	<b>14.5</b>	MTH 246 Calculus II	4		
		Elective/Minor Credit	3		
		<b>TERM SUBTOTAL:</b>	<b>18.5</b>		
Christian Tradition	3	Biblical Tradition	3		
Global Perspective	3	Understanding Social Science	3		
MTH 347 Calculus III	3	PHY 471 Classical Mechanics	3		
PHY 301 Modern Physics	3	PHY 497 Directed			
PHY 397 Research Methods	2	Independent Research	3		
One of MTH 350, 529, 543, 545, 561		One of MTH 350, 529, 543, 545, 561			
-OR- CHM 203 -AND- 204	3-4	-OR- CHM 205 -AND- 206	3-4		
<b>TERM SUBTOTAL</b>	<b>17-18</b>	Elective/Minor Credit	2		
		<b>TERM SUBTOTAL:</b>	<b>17-18</b>		
Literature	3	Ethics	3		
Doing Social Science	3	Fine Arts	3		
PHY 531 Quantum Mechanics	3	PHY 481 Electricity and Magnetism			
PHY 541 Thermo and Stat Mech		& PHY 303 Electronics Lab			
-OR- Elective	3	-OR- PHY 511 Physical Optics			
Elective/Minor Credit	3	& PHY 512 Optics Laboratory	4		
<b>TERM SUBTOTAL:</b>	<b>15</b>	PHY 5XX Physics Elective			
		-OR- MTH 5XX Math Elective	4		
		Elective/Minor Credit	3		
		<b>TERM SUBTOTAL:</b>	<b>17</b>		
Foreign Language	4	PHY 481 Electricity and Magnetism			
Intersections	3	& PHY 303 Electronics Lab			
Physics Advanced Lecture Elective	3	-OR- PHY 511 Physical Optics			
PHY 491 Seminar	1	& PHY 512 Optics Laboratory	4		
PHY 5XX Elective (GR)	3	Ultimate Questions	3		
PHY 611 Classical Mechanics -OR-		PHY 499 Research Capstone	1		
PHY 621 Electromagnetic Theory	3	Elective/Minor Credit	3		
<b>TERM SUBTOTAL:</b>	<b>17</b>	PHY 631 Quantum Mechanics -OR-			
		PHY 641 Statistical Mechanics	3		
		PHY 791 Graduate Seminar	1		
		<b>TERM SUBTOTAL:</b>	<b>15</b>		
PHY 611 Classical Mechanics -OR-					
PHY 621 Electromagnetic Theory	3	PHY 5XX Elective (GR)	3		
PHY 791 Graduate Seminar	1	PHY 631 Quantum Mechanics -OR-			
PHY 797 Directed		PHY 641 Statistical Mechanics	3		
Independent Research	2	PHY 791 Graduate Seminar	1		
PHY 799 Master's Thesis	2	PHY 799 Master's Thesis	4		
<b>TERM SUBTOTAL:</b>	<b>8</b>	<b>TERM SUBTOTAL:</b>	<b>11</b>		

**GRAND TOTAL:** **148-150**  
118-120 Undergraduate + 30 Graduate Credit Hours  
14 credit hours used by both BA and MS Degree



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# Bachelor of Science in Physics (BS) to Master of Science in Physics (MS)

CORE REQUIREMENTS	CREDITS	COURSES IN MAJOR THAT SATISFY THE CORE REQUIREMENT	MAJOR	CREDITS
<b>MAGIS CORE—FOUNDATIONS</b>			General Physics I (PHY 213 <b>-OR-</b> 221)	3
Composition	3		General Physics Lab I	1
Critical Issues*	3		(PHY 205 <b>-OR-</b> PHY 223)	
Oral Communication	1		General Physics II (PHY 214 <b>-OR-</b> 222)	3
Math Reasoning	2	MTH 245 Calculus I	General Physics Lab II	1
Philosophical Ideas	3		(PHY 206 <b>-OR-</b> PHY 224)	
Christian Tradition	3		PHY 301 Modern Physics	3
			PHY 303 Electronics Lab	1
<b>MAGIS CORE—EXPLORATIONS</b>			PHY 331/2 Optics and Optics Lab	4
Understanding Natural Science	4	General Physics I (PHY 213 <b>-OR-</b> PHY 221)	PHY 397 Research Methods	2
Understanding Social Science	3		PHY 471 Classical Mechanics	3
Global Perspectives	3		PHY 497 Directed	
Literature	3		Independent Research	1
Ethics	3		PHY 481 Electricity and Magnetism	
Biblical Tradition	3		<b>-OR-</b> Elective	3
Fine Arts	3		PHY 499 Research Capstone	1
Foreign Language	4		PHY 531 Quantum Mechanics	3
			PHY 541 Thermo and Stat Mech	3
<b>MAGIS CORE—INTEGRATIONS</b>				
Intersections*	3		MTH 245 Calculus I	4
Doing Natural Science	4	General Physics with Lab II	MTH 246 Calculus II	4
Doing Social Science	3	(PHY 206 <b>-OR-</b> PHY 224)	MTH 347 Calculus III	3
Ultimate Questions	3		Two of MTH 350, 529, 543, 545, 561	
			<b>-OR-</b> CHM 203, 204, 205, 206	6–8
<b>DESIGNATED COURSES</b>				
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		

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.

## FOR MORE INFORMATION

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