## **ACCELERATED PLAN**

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

FALL COURSES	CREDITS	SPRING COURSES	CREDITS
RSP: Intro to Collegiate Life Composition General Physics I (PHY 213 -OR- 221) General Physics I Lab (PHY 205 -OR- PHY 223) MTH 245 Calculus I Elective/Minor Credit TERM SUBTOTAL:	0.5 3 1 4 3 14.5	RSP: Intro to Collegiate Life Oral Communications Critical Issues Philosophical Ideas General Physics II (PHY 214 -OR- 222) General Physics II Lab (PHY 206 -OR- PHY 224) MTH 246 Calculus II Elective/Minor Credit TERM SUBTOTAL:	0.5 1 3 3 1 4 3 <b>18.5</b>
Christian Tradition Global Perspective MTH 347 Calculus III PHY 301 Modern Physics PHY 397 Research Methods One of MTH 350, 529, 543, 545, 56 -OR- CHM 203 -AND- 204 TERM SUBTOTAL	3 3 3 2 31 3–4 17–18	Biblical Tradition Understanding Social Science PHY 471 Classical Mechanics PHY 497 Directed Independent Research One of MTH 350, 529, 543, 545, 56 -OR- CHM 205 -AND- 206 Elective/Minor Credit TERM SUBTOTAL:	3 3 3 1 3–4 2 17–18
Literature Doing Social Science PHY 303 Electronics Lab PHY 531 Quantum Mechanics PHY 541 Thermo and Stat Mech -OR- Elective Elective/Minor Credit TERM SUBTOTAL:	3 3 3 3 3 18	Ethics Fine Arts PHY 481 Electricity and Magnetism -OR- Elective PHY 5XX Physics Elective -OR- MTH 5XX Math Elective Elective/Minor Credit TERM SUBTOTAL:	3 3 4 3 16
Foreign Language Intersections Physics Advanced Lecture Elective PHY 491 Seminar PHY 5XX Elective (GR) PHY 611 Classical Mechanics -OR- PHY 621 Electromagnetic Theory TERM SUBTOTAL:	4 3 3 1 3 1 3	Ultimate Questions PHY 499 Research Capstone Elective/Minor Credit PHY 5XX Elective (GR) PHY 631 Quantum Mechanics -OR- PHY 641 Statistical Mechanics PHY 791 Graduate Seminar TERM SUBTOTAL:	3 1 3 3 1 14
PHY 611 Classical Mechanics -OR- PHY 621 Electromagnetic Theory PHY 791 Graduate Seminar PHY 797 Directed Independent Research PHY 799 Master's Thesis TERM SUBTOTAL:	3 1 2 2 <b>8</b>	PHY 631 Quantum Mechanics -OR- PHY 641 Statistical Mechanics PHY 791 Graduate Seminar PHY 799 Master's Thesis TERM SUBTOTAL:	3 1 4 <b>8</b>

SUMMER COURSE CREDITS

### **ACCELERATED PLAN**



## **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
MAGIS CORE—FOUNDATIONS			General Physics I (PHY 213 -
Composition	3		General Physics Lab I
Critical Issues*	3		(PHY 205 - <b>OR-</b> PHY 223)
Oral Communication	1		General Physics II (PHY 214 -
Math Reasoning	2	MTH 245 Calculus I	General Physics Lab II
Philosophical Ideas	3		(PHY 206 <i>-OR</i> - PHY 224)
Christian Tradition	3		PHY 301 Modern Physics
			PHY 303 Electronics Lab
MAGIS CORE—EXPLORATIONS			PHY 331/2 Optics and Optics
Understanding Natural Science	4	General Physics I (PHY 213 -OR-PHY 221)	PHY 397 Research Methods
Understanding Social Science	3		PHY 471 Classical Mechanics
Global Perspectives	3		PHY 497 Directed
Literature	3		Independent Research
Ethics	3		PHY 481 Electricity and Magr
Biblical Tradition	3		-OR- Elective
Fine Arts	3		PHY 499 Research Capstone
Foreign Language	4		PHY 531 Quantum Mechanic
			PHY 541 Thermo and Stat Me
MAGIS CORE—INTEGRATIONS			
Intersections*	3		MTH 245 Calculus I
Doing Natural Science	4	General Physics with Lab II	MTH 246 Calculus II
Doing Social Science	3	(PHY 206 <b>-OR-</b> PHY 224)	MTH 347 Calculus III
Ultimate Questions	3		Two of MTH 350, 529, 543, 5
			<b>-OR-</b> CHM 203, 204, 205, 20
DESIGNATED COURSES			
Oral Communication		PHY 491 Seminar	
Written Communication		PHY 499 Research Capstone	
Statistical Reasoning		PHY 397 Research Methods	
Ethics		PHY 491 Seminar	

PHY 499 Research Capstone

MAJOR CR	EDITS
General Physics I (PHY 213 -OR- 221)	3
General Physics Lab I	1
(PHY 205 - <b>OR-</b> PHY 223)	
General Physics II (PHY 214 -OR- 222)	3
General Physics Lab II	1
(PHY 206 <b>-OR-</b> PHY 224)	
PHY 301 Modern Physics	3
PHY 303 Electronics Lab	1
PHY 331/2 Optics and Optics Lab	4
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	3
MTH 245 Calculus I	4
MTH 246 Calculus II	4
MTH 347 Calculus III	3
Two of MTH 350, 529, 543, 545, 561	9
-OR- CHM 203, 204, 205, 206	6–8
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 ${\bf Masters\ classes\ shown\ in\ {\bf LIGHT\ BLUE\ will\ be\ taken\ while\ an\ undergraduate\ student.}$ Masters classes shown in GRAY will be taken while a graduate student.

Technology

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.

