

Bachelor of Science in Physics

2021-2022 Catalog

Student: _____

ID#: _____

Advisor: _____

DATE: ____/____/____

Overall Requirements to Graduate

- 120+ semester hours
- Completion of core curriculum
- Completion of a major
- 36 upper division credit hours
- GPA above 2.0
- Major GPA above 2.0
- Minor/Program complete (optional)



**UNIVERSITY OF
ST. THOMAS**

Credit Hour Breakdown	
Hours completed	
Hours in progress	
Core hours needed	
Major hours needed	
(Minor hours needed)	
(Other hours needed)	
Elective hours needed	
TOTAL HOURS (120+)	

Core Curriculum (46 hours)		Complete	Needed
Theology (9 credit hours) Must take in order. (Pre-req: Phil 1311 or 1315/3315)			
<input type="checkbox"/> THEO 1301/3301 Intro to Sacred Scriptures <input type="checkbox"/> THEO 2301/3311 Teachings of the Catholic Church <input type="checkbox"/> THEO 3349 Christ and the Moral Life (Phil 2314 or 2316/3316)	Students with 30-59 transfer hrs: 6-9 hours THEO 6-9 hours PHIL 3 hours Synthesis <i>(18 hours total)</i>	Students with 60+ transfer hrs: 6 hours THEO 6 hours PHIL NO synthesis <i>(12 hours total)</i>	
Philosophy (9 credit hours) Choose one sequence:			
<u>Systematic Sequence (must take in order)</u> <input type="checkbox"/> PHIL 1311 Philosophy of the Human Person <input type="checkbox"/> PHIL 2314 Ethics <input type="checkbox"/> PHIL 3313 Metaphysics	<u>Historical Sequence (must take in order)</u> <input type="checkbox"/> PHIL 1315/3315 Ancient Philosophy <input type="checkbox"/> PHIL 2316/3316 Medieval Philosophy <input type="checkbox"/> PHIL 3317 – Modern Philosophy		
Synthesis Course (3 credit hours)			
Choose one synthesis course (recommended by advisor) from the Synthesis Course List.			
English (9 credit hours)* Must take in order.			
<input type="checkbox"/> ENGL 1341 The Classical Tradition: Literature & Composition I <input type="checkbox"/> ENGL 1342 The Middle Ages: Literature & Composition II <input type="checkbox"/> ENGL 2312 The Modern World: Literature & Composition III	*Students with transfer credit: 3 transfer credits: <i>Take 1341/1342 (left)</i> 6 transfer credits: <i>Take ENGL 3312 (below)</i> <input type="checkbox"/> ENGL 3312 <i>Perspectives in World Lit.</i>		
History (6 credit hours) Choose one pair of courses:			
<u>World History</u> <input type="checkbox"/> HIST 1335 World Community I <input type="checkbox"/> HIST 1336 World Community II	<u>U.S. History</u> <input type="checkbox"/> HIST 2333 U.S. History to 1877 <input type="checkbox"/> HIST 2334 U.S. History since 1877		
Social and Behavioral Sciences (6 credit hours) Choose one option:			
<u>Social and Behavioral Sciences Option</u> <input type="checkbox"/> Choose two courses from the Social and Behavioral Sciences Core course list. <input type="checkbox"/> POSC 2331 is recommended	<u>Social and Behavioral Sciences + Oral Communication Option</u> <input type="checkbox"/> Choose one course from the Social & Behavioral Sciences Core course list. <input type="checkbox"/> Choose one course from the Communication Core Course list.		
Natural Sciences (8-10 credit hours) Choose one option:			
<u>Natural Sciences Option (8 credit hours)</u> <input type="checkbox"/> Choose two lecture/laboratory courses from the Natural Sciences Core course list.	<u>Natural Sciences + Modern and Classical Language Option (10 credit hours)</u> <input type="checkbox"/> Choose one lecture/laboratory course from the Natural Sciences Core course list. <input type="checkbox"/> Choose two sequential courses in a language. Courses must be completed in order		(Included in major)
Mathematics (3 credit hours)			
<input type="checkbox"/> Choose one course from the Mathematics Core Course list.			(Included in major)
Fine Arts (3 credit hours)			
<input type="checkbox"/> Choose one course from the Fine Arts Core Course list. <i>ARTHS 3352 Survey of Art II is recommended</i>			
Freshman Symposium (1 credit hour) Required for all incoming freshmen.			
<input type="checkbox"/> UNIV 1111 Freshman Symposium			

Last updated on March 27, 2021

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Major Requirements (68 credit hours)	Completed	Needed
Physics Required Coursework (39 credit hours)		
<input type="checkbox"/> ENGR 1300/1100 Introduction to Engineering w/lab <input type="checkbox"/> PHYS 2333/2111 – University Physics I w/ lab (MATH 1431 co-req or pre-req) <input type="checkbox"/> PHYS 2334/2112 – University Physics II w/ lab (MATH 1432 co-req or pre-req) <input type="checkbox"/> PHYS 3337/3137 – Modern Physics with Lab (PHYS 2334/2112) <input type="checkbox"/> PHYS 3338 – Classical Mechanics <input type="checkbox"/> PHYS 3333/3133 – Electrical Circuits with Laboratory (PHYS 3343, PHYS 2334) <input type="checkbox"/> PHYS 3343 – Mathematical Methods for Physics and Engineering (PHYS 2334, MATH 1432) <input type="checkbox"/> PHYS 3130 – Junior/Senior Seminar <input type="checkbox"/> PHYS 3336/CHEM 4162 – Thermodynamics w/ Lab (CHEM 1342/1142; MATH 1432; PHYS 2334) <input type="checkbox"/> PHYS 3138 – Advanced Laboratory (PHYS 3137) <input type="checkbox"/> PHYS 4333 – Electromagnetism (MATH 2431, PHYS 2334, PHYS 3338, PHYS 3343) <input type="checkbox"/> PHYS 4334 – Quantum Mechanics (PHYS 3337, PHYS 3338, PHYS 3343,) <input type="checkbox"/> PHYS 4150 – Laboratory Research Methods		
Physics electives (9 credit hours)		
Complete 9 elective hours in physics. Consult with Academic Advisor for options.		
Chemistry (8 credit hours) Must take in order.		
<input type="checkbox"/> CHEM 1341/1141 – General Chemistry I and laboratory <input type="checkbox"/> CHEM 1342/1142 – General Chemistry II and laboratory (CHEM 1341/1141)		
Mathematics (12 credit hours) Must take in order.		
<input type="checkbox"/> MATH 1431 – Calculus I (MATH 1331 with a C or better) <input type="checkbox"/> MATH 1432 – Calculus II (MATH 1431 with a C or better) <input type="checkbox"/> MATH 2431 – Calculus III (MATH 1432 with a C or better)		

Electives	Completed	Needed
Electives to reach the 120 hour minimum to graduate (6 hours)		

Totals	Completed	Needed
Total undergraduate hours (120 minimum):		

MINIMUM TOTAL: 120+

Admission to all PHYS courses with prerequisites require a “C” or better in those prerequisites