

Bachelor of Science in Chemistry

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 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.	<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.				
Freshman Symposium (1 credit hour) Required for all incoming freshmen.				
<input type="checkbox"/> UNIV 1111 Freshman Symposium				

Last updated on July 7, 2021

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Major Requirements (63 credit hours)		Completed	Needed
Chemistry Required Courses (38 credit hours)			
<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) <input type="checkbox"/> CHEM 2343/2143 – Organic Chemistry I and laboratory (CHEM 1342/1142) <input type="checkbox"/> CHEM 3333/3133 – Organic Chemistry II and laboratory (CHEM 2343/2143) <input type="checkbox"/> CHEM 3334/3134 – Biochemistry and laboratory (junior standing; CHEM 2343/2143) <input type="checkbox"/> CHEM 3343/3143 – Analytical Chemistry and laboratory (CHEM 1342/1142) <input type="checkbox"/> CHEM 4331/4131 – Advanced Organic Chemistry and laboratory (CHEM 3333/3133) <input type="checkbox"/> CHEM 4332/4132 – Inorganic Chemistry and laboratory (CHEM 3333/3133) <input type="checkbox"/> CHEM 4362/4162 – Thermodynamics and Reaction Kinetics and laboratory (CHEM 3333/3133; MATH 1432; PHYS 1331/1332 or PHYS 2333/2112) <input type="checkbox"/> CHEM 4112 – Scientific Communication (junior or senior standing) <input type="checkbox"/> CHEM 4150 – Laboratory Research Methods			
Additional Chemistry (6 credit hours) Choose two from the following.			
<input type="checkbox"/> CHEM 4334 – Advanced Biochemistry (CHEM 3343/3143) <input type="checkbox"/> CHEM 4344 – Advanced Analytical Techniques (CHEM 3343/3143) <input type="checkbox"/> CHEM 4354 – Environmental Chemistry (CHEM 3343/3143) <input type="checkbox"/> CHEM 4361 – Quantum Chemistry (CHEM 3333/3133; MATH 2343; PHYS 1332/1112 or PHYS 2334/2112) <input type="checkbox"/> CHEM 4364 – Materials Science (CHEM 2343/2143 or PHYS 3337/3137)			
Mathematics (11 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 2343 – Differential Equations I (MATH 1432 with a C or better)			
Physics (8 credit hours) Choose one pair of courses.			
<input type="checkbox"/> PHYS 1331/1111 – General Physics I w/lab <input type="checkbox"/> PHYS 1332/1112 – General Physics II w/lab	<input type="checkbox"/> PHYS 2333/2111 – University Physics I w/lab (Math 1431) <input type="checkbox"/> PHYS 2334/2112 – University Physics II w/lab		

Electives		Completed	Needed
Electives to reach the 120 hour minimum to graduate (11 hours)			
<i>This major contains 32 upper-division (3000 or 4000 level) credit hours. 36 upper-division credit hours are required for graduation. Consider additional upper-division options in the core or electives.</i>			

Totals		Completed	Needed
Total undergraduate hours (120 minimum):			

MINIMUM TOTAL: 120+