

## **Texas Lutheran University Degree Plan**

## **Bachelor of Science in Applied Physics – Computational**

Student Name: \_\_\_\_\_\_ ID#: \_\_\_\_\_

Prospective Graduation Date: \_\_\_\_\_ Catalog Year: 2023-24

General Education		
Take the following <b>Foundation</b> requirements (18 hrs):		
Basic Quantitative Literacy		
MATH130 College Math or higher		
Critical Reading		
FREX134 Exploring the Arts & Sciences		
Engaging Faith Traditions		
THEO133 Intro to Theology		
Modern Language		
Foreign language at 131 level or higher *		
Written Communication		
COMP131 Composition I		
COMP132 Composition II		
* The language requirement can also be met by a study abroad		

\* The language requirement can also be met by a study abroad program lasting 4 weeks.

Take the following <b>Distribution</b> requirements (24 hrs):				
Arts	Arts 6 hrs			
Hum	nanities 12 hrs (no more than 2 courses/discipline)			
Natu	ural Sciences & Math 6 hrs (1 crs w/lab)			
	PHYS 240 Principles of Physics I			
$\checkmark$	CHEM 143 General Chemistry I			
Soci	al Sciences 6 hrs			

Take the following Competencies:			
3 Critical Thinking Courses (T)			
3 Engaged Citizenship Courses (Z)			
2 Communication Courses (C)			
1 Ethics Course (E)			-

Reflective Modules (3)			

Physic (50 hrs)		
PHYS 240 Intro Physics for Scientists & Eng I		
PHYS 241 Intro Physics for Scientists & Eng II		
PHYS 331 Mechanics or PHYS 337 Dynamics		
PHYS 332 Electricity & Magnetism		
PHYS 334 Modern Physics		
PHYS 313 Modern Physics Lab		
PHYS 335 Quantum or PHYS 336 Stat & Thermal		
PHYS 348 Applied Optics		
PHYS 371 Math Methods for Scientists & Engineers		
PHYS 381 Digital Electronics		
PHYS 384 Advanced Lab in Physics		
PHYS 390 Applied Computational Physics I		
PHYS 391 Applied Computational Physics II		
PHYS 392 Thermal & Fluids Physics for Engineering		
PHYS 437 Physics Research		
PHYS 438 Senior Seminar in Physics		

Computational Specialization (7 hrs)		
	CSCI 249 Object-Oriented Design & Methodology	
	CSCI 338 Numerical Methods	

Supporting coursework (30 hrs)		
	CHEM 143 General Chemistry I	
	CHEM 144 General Chemistry II	
	MATH 241 Calculus I	
	MATH 242 Calculus II	
	MATH 334 Differential Equations	
	MATH 343 Calculus III	
	CSCI 248 Object Oriented Programming	
	STAT 374 Statistics	

Electives or minor to total 124 hrs				

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IMPORTANT: An overall GPA of 2.0 and a major/minor GPA of 2.0 is required for graduation. All degrees require a minimum of 124 hours. It is the responsibility of the student to fulfill all degree requirements. Advisor: \_\_\_\_\_ Dept Chair: \_\_\_\_\_ Student: \_\_\_\_\_ 
 Registrar:
 \_\_\_\_\_
 Date:
 \_\_\_\_\_\_