Texas Lutheran University Undergraduate Degree Plan

Bachelor of Science : Physics - Applied Computational

Student Name: _____ **ID#:** _____

Prospective Graduation Date: _____ **Catalog Year:** 2024-2025

General Education			
Note	**CrHr**	**Course Title**	**Competency**
18	**hrs**	**Foundation requirements:**	
Basic Quantitative Literacy			
	3	MATH130 College Math or higher	T
Critical Reading			
	3	FREX 134	
Engaging Faith Traditions			
	3	THEO 133	
Modern Language*			
	3	Foreign language at 131 level or higher	Z
Written Communication			
	3	COMP 131	
	3	COMP 132	
*Can be met by a study abroad program lasting 4+ weeks			
32	**hrs**	**Distribution requirements:**	
	6	**Arts**	
	3		
	3		
	12	**Humanities (Max 2 courses/discipline)**	
	3		
	3		
	3		
	3		
	6	**Natural Sciences & Math (1 crs w/lab)**	
	4	PHYS 240	
	4	CHEM 143	
	6	**Social Sciences**	
	3		
	3		

Complete each of the following **Competencies:**			
3 Critical Thinking Courses (T)	X		
3 Engaged Citizenship Courses (Z)	X		
2 Communication Courses (C)			
1 Ethics Course (E)			

Reflective Modules (2)	

133	**Total Hours – 124 Hours Needed**

Student: _____

Advisor: _____

Dept Chair: _____

Registrar: _____

Date: _____

46	**hrs**	Physics - Applied Computational	
Note	**CrHr**	**Course Title**	**Competency**
	4	PHYS 241 Intro Physics for Scientist & Eng II	
	3	PHYS 331 Mechanics or 337 Dynamics	
	3	PHYS 332 Electricity & Magnetism	
	3	PHYS 334 Modern Physics	
	1	PHYS 313 Modern Physics Lab	
	3	PHYS 335 Quantum or 336 Stat & Termal	
	4	PHYS 348 Applied Optics	
	3	PHYS 371 Math Methods for Scientist & Engineers	
	4	PHYS 381 Digital Electronics	
	3	PHYS 384 Advanced Lab in Physics	
	3	PHYS 390 Applied Computational Physics I	
	3	PHYS 391 Applied Computational Physics II	
	3	PHYS 392 Thermal & Fluids Physics for Engineering	
	3	PHYS 437 Physics Research	
	3	PHYS 438 Senior Seminar in Physics	
7	**hrs**	**Specialization**	
	4	CSCI 249 Object- Oriented Design & Methodology	
	3	CSCI 338 Numerical Methods	
26	**hrs**	**Supporting Coursework**	
	4	CHEM 144 General Chemistry II	
	4	MATH 241 Calculus I	
	4	MATH 242 Calculus II	
	3	MATH 334 Differential Equations	
	4	MATH 343 Calculus III	
	4	CSCI 248 Object Oriented Programming	
	3	STAT 374 Statistics	
0	**hrs**	**Electives / Minor**	

IMPORTANT: An overall GPA of 2.0 and a major/minor GPA of 2.0 is required for graduation. All undergraduate degrees require a minimum of 124 hours. It is the student's responsibility to fulfill all degree requirements.