

LA SIERRA UNIVERSITY

PHYSICS BS PATHWAY

Total Units Required: 190 units

Required Course Listings (starting Fall 2021)

This breakdown shows a Physics BS Pathway to be completed in 4 years at La Sierra University. All courses with a star (★) indicate a prerequisite or multiple prerequisites for the class. Courses with a dagger (†) are only offered in years ending with an odd number (e.g. 2022-2023 school year) and courses with a double dagger (‡) are only offered in years ending with an even number (e.g. 2023-2024 school year). By following the suggested/required sequencing all necessary prerequisite courses will be fulfilled. Please consult the Bulletin, Records, or your Guided Pathways Advisor for more information about prerequisites.

Major Requirements (98 units)			General Education Requirements (92 units)		
Course	Course Title	Units	Course	Course Title	Units
PHYS 231B	University Physics I★	4	UNST 101	First Year Seminar	3
PHYS 231L	General Physics I Lab★	1	ENGL 111	College Writing I	3
PHYS 232B	University Physics II★	4	ENGL 112	College Writing II★	3
PHYS 232L	General Physics II Lab★	1	ENGL 113	College Writing III★	3
PHYS 233B	University Physics III★	4	WDLG 151	World Language I	4
PHYS 233L	General Physics III Lab★	1	WDLG 152	World Language II★	4
PHYS 301	Mathematical Physics★	4	WDLG 153	World Language III★	4
PHYS 308	Computational Physics★†	2	HLSC 120	Lifetime Fitness	2
PHYS 315	Modern Physics★†	4	SSCI 20X-SL	SSCI Theme Course (with Service Learning)	4
PHYS 326	Human Body Mechanics★	4	THM1 X00	Theme I Elective	4
PHYS 327	Advanced Mechanics★‡	4	HUMN 10X	HUMN Theme Course	4
PHYS 344	Quantum Physics★‡	4	THM2 X00	Theme II Elective	8
PHYS 385	Physics Seminar I	1	RLGN 304	Adventism in Global Perspective★	4
PHYS 389	Rhetorical Experiences in Physics	0	RELB X00	Theme IIIBiii - Scripture Elective	4
PHYS 415	Advanced Physics Lab I★	2	THM3 3/400	Theme III Elective Upper Division★	4
PHYS 416	Advanced Physics Lab II★	2	THM3 X00	Theme III Elective	4
PHYS 464	Statistical & Thermal Physics★†	4	NSCI 40X-SL	NSCI Theme Course (with Service Learning)★	4
PHYS 481	Electromagnetic Theory I★‡	4	THM4 B00	Theme IV - Life Science Elective	4
PHYS 482	Electromagnetic Theory II★‡	4	UNST 404U-SL	Senior Seminar: Religion, Values & Social Responsibility (with Service Learning)★	4
PHYS 485	Physics Seminar II	1	elct X00	Elective	18
PHYS 3/400	Physics Upper Division Elective★	4			
CHEM 111	General Chemistry I	4			
CHEM 111L	General Chemistry I Lab	1			
CHEM 112	General Chemistry II★	4			
CHEM 112L	General Chemistry II Lab★	1			
CHEM 113	General Chemistry III★	4			
CHEM 113L	General Chemistry III Lab★	1			
CPTG 121	Introduction to Computer Science I★	4			
MATH 131	Calculus I★	4			
MATH 132	Calculus II★	4			
MATH 133	Calculus III★	4			
MATH 231	Introduction to Linear Algebra★	4			
MATH 232	Differential Equations★	4			

Sequencing

Physics BS Pathway in 4 years at La Sierra University starting in Fall 2021.

Year 1			Year 1			Year 1		
Fall Quarter (15 units)			Winter Quarter (17 units)			Spring Quarter (17 units)		
Course	Course Title	Units	Course	Course Title	Units	Course	Course Title	Units
CHEM 111	General Chemistry I	4	CHEM 112	General Chemistry II*	4	CHEM 113	General Chemistry III*	4
CHEM 111L	General Chemistry I Lab	1	CHEM 112L	General Chemistry II Lab*	1	CHEM 113L	General Chemistry III Lab*	1
MATH 131	Calculus I*	4	MATH 132	Calculus II*	4	MATH 133	Calculus III*	4
ENGL 111	College Writing I	3	ENGL 112	College Writing II*	3	ENGL 113	College Writing III*	3
HLSC 120	Lifetime Fitness	2	UNST 101	First Year Seminar	1	UNST 101	First Year Seminar	1
UNST 101	First Year Seminar	1	HUMN 10X	HUMN Theme Course	4	THM2 X00	Theme II Elective	4
Year 2			Year 2			Year 2		
Fall Quarter (17 units)			Winter Quarter (15 units)			Spring Quarter (17 units)		
Course	Course Title	Units	Course	Course Title	Units	Course	Course Title	Units
PHYS 231B	University Physics I*	4	PHYS 232B	University Physics II*	4	PHYS 233B	University Physics III*	4
PHYS 231L	General Physics I Lab*	1	PHYS 232L	General Physics II Lab*	1	PHYS 233L	General Physics III Lab*	1
CPTG 121	Introduction to Computer Science I*	4	MATH 232	Differential Equations*	4	SSCI 20X-SL	SSCI Theme Course (with Service Learning)	4
MATH 231	Introduction to Linear Algebra*	4	THM3 X00	Theme III Elective	4	THM1 X00	Theme I Elective	4
elct X00	Elective	4	elct X00	Elective	2	elct X00	Elective	4
Year 3			Year 3			Year 3		
Fall Quarter (16 units)			Winter Quarter (15 units)			Spring Quarter (16 units)		
Course	Course Title	Units	Course	Course Title	Units	Course	Course Title	Units
PHYS 301	Mathematical Physics*	4	PHYS 327	Advanced Mechanics*‡	4	PHYS 344	Quantum Physics*‡	4
PHYS 326	Human Body Mechanics*	4	PHYS 385	Physics Seminar I	1	PHYS 3/400	Physics Upper Division Elective*	4
RLGN 304	Adventism in Global Perspective*	4	PHYS 415	Advanced Physics Lab I*	2	RELB X00	Theme IIIBiii - Scripture Elective	4
THM4 B00	Theme IV - Life Science Elective	4	THM2 X00	Theme II Elective	4	elct X00	Elective	4
			elct X00	Elective	4			
Year 4			Year 4			Year 4		
Fall Quarter (14 units)			Winter Quarter (15 units)			Spring Quarter (16 units)		
Course	Course Title	Units	Course	Course Title	Units	Course	Course Title	Units
PHYS 308	Computational Physics*†	2	PHYS 416	Advanced Physics Lab II*	2	PHYS 389	Rhetorical Experiences in Physics	0
PHYS 315	Modern Physics*†	4	PHYS 464	Statistical & Thermal Physics*‡	4	PHYS 482	Electromagnetic Theory II*‡	4
WDLG 151	World Language I	4	PHYS 481	Electromagnetic Theory I*‡	4	UNST 404U-SL	Senior Seminar: Religion, Values & Social Responsibility (with Service Learning)*	4
NSCI 40X-SL	NSCI Theme Course (with Service Learning)*	4	PHYS 485	Physics Seminar II	1	WDLG 153	World Language III*	4
			WDLG 152	World Language II*	4	THM3 3/400	Theme III Elective Upper Division*	4