Physics, Minor

A minor in physics represents a substantial investment in mastering the basics of physics and gaining suitable problem solving skills that may then be applied to other disciplines.

Matriculation Requirements

1. Admitted to a bachelor degree program at UVU.

Program Requirements

Code	Title	Credit Hours
Total Credit Hours		**20**
Discipline Core Requirements		**20 Credits**
PHYS 2210	Physics for Scientists and Engineers I PP	4
PHYS 2215	Physics for Scientists and Engineers I Lab	1
PHYS 2220	Physics for Scientists and Engineers II PP	4
PHYS 2225	Physics for Scientists and Engineers II Lab	1
PHYS 3110	Modern Physics I	3
PHYS 3115	Introduction to Experimental Physics I WE	2
Complete a minimum of 5 credits from the following courses:		5
ASTR 3050	Astrophysics I (3)	
ASTR 3060	Astrophysics II (3)	
PHYS 2500	Elementary Fluids and Thermal Physics (3)	
PHYS 2700	Biophysics (undefined)	
PHYS 2800	Introduction to Materials Physics (3)	
PHYS 3120	Modern Physics II (3)	
PHYS 3125	Introduction to Experimental Physics II WE (2)	
PHYS 3230	Principles of Electronics for the Physical Sciences (3)	
PHYS 3300	Mathematical and Computational Physics I (3)	
PHYS 3310	Advanced Mathematical Physics (3)	
PHYS 3330	Mathematical and Computational Physics II (undefined)	
PHYS 3400	Classical Mechanics (3)	
PHYS 3500	Thermodynamics (3)	
PHYS 3600	Optics (undefined)	
PHYS 3800	Energy Use on Earth GI (3)	
PHYS 4210	Advanced Experimental Techniques (3)	
PHYS 4250	Nuclear Physics (3)	
PHYS 4410	Electrostatics and Magnetism (3)	
PHYS 4420	Electrodynamics (3)	
PHYS 4510	Quantum Mechanics I (3)	
PHYS 4520	Quantum Mechanics II (3)	
PHYS 4700	Acoustics (3)	
PHYS 4800	Solid State Physics (3)	
PHYS 490R	Seminar (0.5)	
METO 3100	Climate and the Earth System (3)	

Graduation Requirements

1. A minimum grade of "C" must be earned in all minor courses.

Graduation Plan

This graduation plan is a sample plan and is intended to be a guide. Your specific plan may differ based on your Math and English placement and/or transfer credits applied. You are encouraged to meet with an advisor and set up an individualized graduation plan in Wolverine Track (http://www.uvu.edu/wolverinetrack/).

First Year		
Semester 1		**Credit Hours**
PHYS 2210	Physics for Scientists and Engineers I PP	4
PHYS 2215	Physics for Scientists and Engineers I Lab	1
	Credit Hours	**5**
Semester 2		
PHYS 2220	Physics for Scientists and Engineers II PP	4
PHYS 2225	Physics for Scientists and Engineers II Lab	1
	Credit Hours	**5**
Second Year		
Semester 3		
PHYS 3110	Modern Physics I	3
PHYS 3115	Introduction to Experimental Physics I WE	2
	Credit Hours	**5**
Semester 4		
Complete a minimum of 5 Credits from the following courses:		5
ASTR 3050	Astrophysics I	
ASTR 3060	Astrophysics II	
PHYS 2500	Elementary Fluids and Thermal Physics	
PHYS 2700	Biophysics	
PHYS 2800	Introduction to Materials Physics	
PHYS 3120	Modern Physics II	
PHYS 3125	Introduction to Experimental Physics II WE	
PHYS 3230	Principles of Electronics for the Physical Sciences	
PHYS 3300	Mathematical and Computational Physics I	
PHYS 3310	Advanced Mathematical Physics	
PHYS 3330	Mathematical and Computational Physics II	
PHYS 3400	Classical Mechanics	
PHYS 3500	Thermodynamics	
PHYS 3600	Optics	
PHYS 3800	Energy Use on Earth GI	
PHYS 4210	Advanced Experimental Techniques	
PHYS 4250	Nuclear Physics	
PHYS 4410	Electrostatics and Magnetism	
PHYS 4420	Electrodynamics	
PHYS 4510	Quantum Mechanics I	
PHYS 4520	Quantum Mechanics II	
PHYS 4700	Acoustics	
PHYS 4800	Solid State Physics	
PHYS 490R	Seminar	
METO 3100	Climate and the Earth System	
	Credit Hours	**5**
	Total Credit Hours	**20**

Program Learning Outcomes

1. Demonstrate understanding of how science and physics work in practice by correctly using evidence, experiment and observation, interpretation, physical concepts, etc.
2. Apply fundamental physical concepts including conservation laws, forces, fields, energy, optics, thermal and statistical physics, relativity, and quantum mechanics.
3. Use mathematics and mathematical models correctly to solve physics problems.
4. Follow practices necessary for safely using laboratory equipment.
5. Demonstrate understanding of the role of computation in physics and appropriate computer skills.

6. Communicate effectively about physics in writing and in presentations, in both formal and informal settings.
7. Demonstrate physics research skills and use ethical research practices.