

B.S. Computational Physics

Program	B.S. in Computational Physics
Department(s)	Physics and Astronomy
College	Sciences

1. Student Learning Outcomes for the program. List the Student Learning Outcomes for the program. *Number for later reference.*

1. understanding of classical mechanics
2. understanding of electricity and magnetism
3. understanding of thermodynamics
4. understanding of modern physics
5. ability to perform modern laboratory experiments
6. ability to perform scientific computer calculations and simulations
7. ability to perform an independent physics research project and give a public talk on this project
8. ability to communicate scientific subject matter
9. understand and be able to communicate the critical importance of science to society

2. Curriculum Alignment of Student Learning Outcomes. Where is the information covered in the courses required in the program?
At what developmental stage is it covered (Beginning, Middle, or End)?

Student Learning
Outcomes for the
Program

Courses in
program
(required &
electives)

1 (use #s from 1 st page)	2	3	4	5	6	7	8		
PHYS 180 PHYS 180L	B								
PHYS 181 PHYS 181L		B							
PHYS 182 PHYS 182L			B	B					
PHYS 300						B			
PHYS 404						M			
PHYS 411				M					
PHYS 413					M				
PHYS 421		M							
PHYS 423	M								
PHYS 467			M						
PHYS 493						E	E	E	

B = Beginning, M = Middle, E = End

B = outcome introduced in beginning of development, such as in introductory course

M = outcome covered in middle stages of development

E = outcome fully developed at the end of career, such as in a capstone course