

# Physics Second Major

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A student who elects a second major in physics must complete a minimum of 24 credit hours in PHYS or ASTR courses, including 12 credit hours in advanced (300-400 level) subject matters (the course PHYS 451 does not count towards the second major). Selection of courses should be determined by the student's interests and approved by the department undergraduate advisor. Please contact either Physics and Astronomy Department Undergraduate Advisor or Department Head.

## Courses Required

PHYS 101	Physics and Astronomy Seminar	1
PHYS 2425	University Physics I	4
PHYS 2426	University Physics II	4
PHYS 317	Mathematical Methods for Physics and Engineering	3
PHYS 321	Modern Physics	3
PHYS 333	Wave Motion, Acoustics, and Optics	4
PHYS 401	Current Topics in Physics and Astronomy (1 sh, must be repeated for total of 2sh)	2
Plus a minimum of 3 sh from:		3
PHYS 319	Computational Physics with Python	
PHYS 332	Digital Electronics	
PHYS 411	Classical Mechanics	
PHYS 412	Electricity and Magnetism	
PHYS 414	Thermodynamics and Kinetic Theory	
PHYS 420	Quantum Mechanics	
PHYS 430	Optics	
PHYS 335	Advanced Physics Laboratory	
ASTR 410	Stellar Structure and Evolution	
ASTR 420	Galaxies and Cosmology	
ASTR 450	Nuclear Astrophysics	

## Total Hours

24

A grade of "C" or higher must be earned in all courses in this Major .