

# Physics Department Requirements

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## Physics Applied BS Requirements

CGPA: \_\_\_\_\_  
Minimum 2.00 GPA: \_\_\_\_\_

Foundation Courses:      Upper level lectures:  
P221 \_\_\_\_\_              P331 \_\_\_\_\_  
P222 \_\_\_\_\_              P441 \_\_\_\_\_  
P301 \_\_\_\_\_

Laboratory Courses:  
P309 \_\_\_\_\_              P350 \_\_\_\_\_  
One of: P400, P451, or P460 \_\_\_\_\_  
(It is recommended that students take BOTH P400 and P451)

Internships\* – 2 credit hours of S407: \_\_\_\_\_  
Thesis – 1 credit hour of S409: \_\_\_\_\_

Minimum 35 Credit Hours in Physics, which means a minimum of 5 additional Physics credits: \_\_\_\_\_  
\_\_\_\_\_

20 Credit hours in Mathematics, including:  
M211 (or S211 or M215) \_\_\_\_\_  
M212 (or S212 or M216) \_\_\_\_\_  
M311 \_\_\_\_\_  
M312 (or PHYS-P321) \_\_\_\_\_      M343 \_\_\_\_\_  
Minimum of 2 additional credits: \_\_\_\_\_

Computer Science, 4 credits, including A201 or both A304/A305 – C211 or H211 may be substituted only with the permission of the advisor: \_\_\_\_\_

9 Credit hours in biological and physical sciences outside of the Departments of Physics, Mathematics, and Computer Science. At least 6 of the 9 credits must be in the same department.  
\_\_\_\_\_  
\_\_\_\_\_

## Fundamental Skills

English Composition: \_\_\_\_\_

Intensive Writing: \_\_\_\_\_

Foreign Language (3 credit hours at or above the second-year level in one language)  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## Distribution Courses

Topics: \_\_\_\_\_

Arts and Humanities (two 3-credit hour courses)  
\_\_\_\_\_  
\_\_\_\_\_

Social and Historical (two 3-credit hour courses)  
\_\_\_\_\_  
\_\_\_\_\_

Culture Studies Courses are not required, but two courses are recommended as electives or to satisfy the distribution requirements.

Courses that will not count toward graduation:  
\_\_\_\_\_  
\_\_\_\_\_

## Required Hours – 122

Completed \_\_\_\_\_ Needs \_\_\_\_\_

No more than 22 credit hours may be taken outside of the College of Arts and Sciences for credit toward the degree.

36 hours at the 300/400 level \_\_\_\_\_  
26 hours from IUB as a senior \_\_\_\_\_

C- or better in each course

## Recommended Courses

- Physics P314, P321, P332, P340, P410-P411, P442, P453, P454 for students planning to pursue a graduate degree in applied physics; alternative programs (such as those with more emphasis on electronics, optics, medical physics, biophysics, accelerator physics, or environmental physics) should be discussed with the physics advisor.
- Mathematics M301 (or M303), M344, M415, M441-M442
- Business courses chosen with the advice of the physics advisor for those students interested in entrepreneurial and management skills in scientific environments.
- Alternative courses from the natural and physical sciences should be discussed with the physics advisor.

*\*Students must complete two **summer** internships – one between a student's Sophomore and Junior years and then the second between the Junior and Senior years.*