

REQUIREMENTS FOR THE BS IN PHYSICS

General education requirements

Foreign language to second semester level

English Composition [placement by English Department]

General Education study areas other than science (science & math automatically satisfied)

[See the College of Science advising staff (Gould-Simpson 1017) for details]

Tier 1: four courses

Tier2: four courses

Physics requirements

One of the introductory sequences:

I. Physics 151, 152, 251, 252

II. Physics 161H, 162H, 261H, 262H

PHYS 204 (Mathematical Techniques in Physics)

PHYS 305 (Computational physics)

PHYS 321 (Mechanics I)

PHYS 426 (Thermal Physics)

PHYS 331 (Electricity and magnetism I)

PHYS 332 (Electricity and magnetism II)

PHYS 371 (Quantum Theory I)

PHYS 381, 382 (Methods in Experimental Physics I and II)

PHYS 472 (Quantum Theory II)

Six units chosen from:

Physics 320 (optics), 405 (digital electronics), 422 (advanced classical mechanics), 431 (biophysics), 436A (atmospheric science), 450 (nuclear physics), 460 (solid state physics), 469 (general relativity), 473 (spectroscopy), 476 (mathematical methods), 481 & 483 (advanced lab III)

Research requirement:

Three units chosen from Physics 483 (advanced lab project), 492 (directed research), 498 (senior capstone)

Either a regular minor or a thematic minor is required.

Requirements for a regular minor are set by the minor department. The thematic minor consists of 18 units of sciences other than physics or mathematics in a program approved by your advisor. No more than three units of a thematic minor can be mathematics courses normally required as prerequisites for physics courses.

Math prerequisites for required physics courses

MATH 124 or 125 (Calculus I)

MATH 129 (Calculus II)

MATH 223 (Vector calculus)

MATH 254 (Differential equations)

Chemistry 103ab, 104ab or 105ab are strongly recommended.

NOTES

Physics 381 and 382 are writing emphasis courses.