# UPenn Physics Major Requirements

## Core Requirements (13.5 cu)

- □ MATH 104
- □ MATH 114
- □ MATH 240
- □ MATH 241
- □ PHYS 150/170 (1.5 cu)
- □ PHYS 151/171 (1.5 cu)
- □ PHYS 230
- □ PHYS 250 (1.5 cu)
- □ PHYS 351
- □ PHYS 361
- □ PHYS 362
- □ PHYS 411

## Concentration Requirements

### Physical Theory/Experimental Technique (4 cu)

- □ PHYS 401
- □ PHYS 364/414
- □ PHYS 412
- □ PHYS/ASTR 300+ Elective

### Chemical Principles (5 cu)

- □ PHYS 401
- □ CHEM 101
- □ CHEM 102
- □ CHEM 221/241
- □ CHEM 222/242

### Computer Techniques (5 cu)

- □ PHYS 401
- □ PHYS 364/414
- □ Computer Elective¹
- □ Computer Elective
- □ Computer Elective

### Astrophysics (6 cu)

- □ PHYS 401
- □ PHYS 364/414/ASTR 250
- □ PHYS 503/505/526/530
- □ ASTR 211
- □ ASTR 212

### Business and Technology (6 cu)

- □ PHYS 364/414
- □ Computer Elective¹
- □ Business Elective¹
- □ Business Elective
- □ Business Elective
- □ Business Elective

### Biological Sciences (7 cu)

- □ PHYS 401
- □ PHYS 280
- □ BIOL 121
- □ BIOL 204/205
- □ BIOL 221
- □ Biology Elective¹
- □ Biology Elective

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¹See Undergraduate Chair to confirm selected electives and visit [physics.upenn.edu/undergraduate/physics-astronomy-major](http://physics.upenn.edu/undergraduate/physics-astronomy-major) for more information.