

# Physics, B.S.

## DEPARTMENT

MN in Physical Science, Minor  
MS in Physics, M.S.  
BS in Physics, B.S.  
MN in Physics, Minor  
MN in Medical Physics, Minor  
MN in Astronomy, Minor  
BS in Biomedical Physics, B.S.  
CRED in Single Subject Credential - Physical Science

## REQUIREMENTS

Department of Physics

### Bachelor of Science Degree Requirements Physics Major

#### 1. Physics Major requirements (45 - 46 units)

Physics core (36 units) (see note 1)

PHYS 4A, PHYS 4AL, PHYS 4B, PHYS 4BL, PHYS 4C, PHYS 102, PHYS 104, PHYS 105A, PHYS 105B, PHYS 107A, PHYS 110, PHYS 115, PHYS 140

Upper-division electives (9 - 10 units)

Includes courses in physics and, with approval, in related fields. Students planning to pursue graduate study in physics are strongly encouraged to take courses from the following list: PHYS 107B, PHYS 135, PHYS 136, PHYS 137, PHYS 150, PHYS 151, PHYS 155, PHYS 156, PHYS 157, PHYS 158, PHYS 162, PHYS 163, PHYS 168S, PHYS 170A, PHYS 171, and PHYS 180 (see note 2)

#### Additional requirements (28-29 units)\*

MATH 75, MATH 76, MATH 77, MATH 81, CHEM 1A, CHEM 1AL, CHEM 1B, CHEM 1BL (25 units) (see notes 1, 3, and 4)

Plus one of the following

CSCI 40 (4 units) or ECE 71 (3 units)

#### 2. General Education requirements (49 units)\*

#### 3. Other requirements (9 units)

American Government and Institutions (PLSI 2), Multicultural and International (MI), and Upper-division writing. Note: Physics majors are exempt from the M/I requirement.

#### 4. Sufficient elective units to meet required total units (varies)

#### 5. Total units (120)

\*7 units will be satisfied by the following two courses in additional requirements: 4 units of CHEM 1A/1AL in G.E. Breadth B1 and 3 units of MATH 75 in G.E. Foundation B4.

#### Advising Notes

1. CR/NC grading is not permitted in the physics major. Additional requirements, however, may be taken CR/NC (see Credit/No Credit Grading).
2. PHYS 190 and PHYS 175T as well as courses outside the Department of Physics may be substituted for physics upper-division electives with prior approval of the department chair.
3. All math and physics prerequisites for the physics major should be completed with a grade of C or better.

## FACULTY

Our faculty members are here to teach and to do research. Several faculty members have research projects involving students.

Our classes are small: our upper-division and graduate classes usually have 10-15 students or less. Physics majors get to know each other very well. They develop friendships with peers, faculty, and staff, which extend well beyond graduation.

There are eight research/creative activity areas that are part of our current efforts: (1) Computational Physics, (2) High Energy Physics (HEP), (3) Strongly Correlated Electron Physics, (4) Nanotechnology, (5) Astronomy and Astrophysics, (6) Microbeam X-ray Fluorescence (XRF), (7) Theoretical Physics, (8) Physics Outreach.

For faculty phone numbers and e-mail, see the campus directory.

For more on the faculty, see the faculty pages.

The faculty pages are updated by the department or program.