

# Biomedical 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

### Bachelor of Science in Biomedical Physics - Requirements

The B.S. in Biomedical Physics is an interdisciplinary program developed with the assistance of the National Institute of Mental Health and the National Institute of Biomedical Imaging and Bioengineering to motivate students pursuing careers in applications of physics in medicine. The curriculum provides fundamental groundwork in physics, mathematics, and biology. For further details, please contact Dr. Amir Huda at 559.278.8427 or visit <http://fresnostate.edu/csm/medicalphysics>.

**Bachelor of Science in Biomedical Physics Requirements.** Those seeking admission to the B.S. in Biomedical Physics major must adhere to university admissions requirements, including submission of applications, official transcripts, and appropriate standardized test scores.

### Biomedical Physics Major

#### 1. Biomedical Physics Requirements (44 units) (see note 1)

Physics core (14 units)  
PHYS 4A, 4AL, 4B, 4BL, 4C, 102

Biology core (8 units)  
BIOL 67A, 144

Upper-division courses (22 units)  
PHYS 135, 136, 137, 155, 156, 157, 158

#### Additional Requirements (30 units)

MATH 75, 76, 77, 81; CHEM 1A, 1AL, 1B, 1BL; ECE 71, 72

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

#### 3. Other requirements (6 units)

Upper-division writing and Multicultural and International (MI)

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

#### 5. Total units (120 units)\*

\* G.E. and MI courses can be double-counted with major requirements. The writing requirement may be met by taking the upper-division writing exam. See advisor for details. Of the 49 required G.E. units, 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. See advisor for details.

### Advising Notes

1. CR/NC grading is not permitted in the biomedical physics major. Additional requirements, however, may be taken for CR/NC (see Credit/No Credit Grading).

2. It is important to fulfill the upper-division writing skills requirement by exam or "W" class after completing 60 units for which a student may request 1 unit of credit.

## **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.