B.S. APPLIED PHYSICS DEGREE REQUIREMENTS

A. Core Requirements:
   Students must complete all courses
   - ☐ Math 2A OR Math 5A
   - ☐ Math 2B OR Math 2D
   - ☐ Math 2E OR Math 3A
   - ☐ Math 3D
   - ☐ Physics 7C-7D-7E-7LC-7LD OR Physics 3A-3B-3C-3LB-3LC

*Physics 7 series is strongly recommended for majors.

B. Lower-Division Lab Requirement:
   ☐ Students must complete 6 units of labs using any combination of the following courses
   - Physics 52A (2 units)
   - Physics 52B (2 units)
   - Physics 52C (2 units)
   - Chem 1LC (2 units)
   - Chem 1LD (2 units)
   - Chem H/M2LA (3 units)
   - Chem H/M2LB (3 units)
   - Chem 51LB (2 units)
   - Chem 51LC (2 units)
   - Chem H/M52LA (3 units)
   - Chem H/M52LB (3 units)
   - ENGR 7A (2 units)
   - ENGR 7B (2 units)
   - EECS 70LA (1 unit)
   - EECS 70LB (1 unit)

   ____ /6 units completed

C. Upper-Division Lab Requirement:
   ☐ Students must complete 8 units of upper-division lab courses, 4 units must be in Physics selecting from the following courses
   - Physics 106W (4 units)
   - Physics 120 (4 units)
   - Physics 121W (4 units)
   - Physics 139 (4 units)
   - Physics 193 (4 units)
   - Physics 196C (4 units)
   - EECS 170LA (1 unit)
   - ENGRMAE 150L (1 unit)
   - Other approved upper-division labs outside of Physics Department

   ____ /8 units completed

D. Writing Communication Requirement:
   ☐ Students must complete one writing communication course selected from the following
   - Physics 194
   - Phy Sci 139W
   - Educ 143BW

   One approved upper-division writing course with departmental approval

E. Elective Requirement:
   The major requires 32 additional units of coherently related elective courses chosen from PHYS 100-150 and/or 200-299 with approval from the Department Undergraduate Advisor. Up to 8 units may be lower-division electives in Physics such as Physics 20, 61B, or H90.

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Optional Concentration in Engineering Physics
For students in the Engineering Physics Concentration, at least 24 of the 32 elective units must come from courses in the Henry Samueli School of Engineering. Pre-approved courses include:

EECS 70A (4 units)
EECS 70B-70LB (4/1 units)
EECS 170A-LA (4/1 units)
EECS 170B-LB (4/1 units)
EECS 170C-LC (4/1 units)
EECS 174 (4 units)
EECS 188 (4 units)
ENGMAE 120 (4 units)
ENGMAE 130A (4 units)
ENGMAE 147 (4 units)

The remaining 8 units may be lower-division or upper-division Physics courses, upper-division Math courses, or Engineering courses; plan requires pre-approval by the Department Undergraduate Advisor.

Optional Concentration in Biomedical Physics
For students in the Biomedical Physics Concentration, the coherently related elective requirement is completed by the following courses:

☐ Chem 1A-1B-1C-1LC-1LD OR Chem H2A-H2B-H2C-H2LA-H2LB OR Chem 1A-1B-M3C-M2LA-M2LB
☐ Chem 51A-51B OR Chem H/M52A-H/M52B

*Requirements in sections A/B/C/D/E may not double-count. Courses can only be applied toward one section.

Effective Fall 2019