

**Physics Major Plans:** *i) The B.S. in Physics* is designed for undergraduates considering professional careers as physicists. It is strongly recommended for students planning to pursue Ph.D. or M.S. degrees and careers in research and development in academia, industry, or government laboratories. *ii) The B.A. in Physics* is for students who are interested in physics, but wish a broader education. It offers enough preparation for graduate study in physics, but is more suited for students who desire a working knowledge of basic physics to pursue allied careers. *iii) The B.A. in Physics with Teaching of Science Concentration* provides the background in physics and mathematics needed for high school teaching. It is not meant for those who want to do graduate work in physics, but is appropriate for graduate study in education. *iv) The B.S. in Mathematical Physics* is intended for students who wish to pursue graduate degrees in theoretical physics or applied mathematics and careers in these areas. *v) The B.S. in Computational Physics* is for students interested in applying advanced computer methods to physics research, or to technical software development. It offers preparation for graduate school in either physics or computer science. *vi) The B.S. in Engineering Physics* (joint plan overseen by E.E. Dept.) is for students attracted to the fundamental aspects of engineering or to allied areas of physics applications; graduate study in electrical engineering *or* applied physics is possible with this major.

The Department's *Minor in Physics* provides a good secondary area of study for science and engineering majors, as well as for students in such areas as philosophy, history, or the arts.

### **Credit Requirements for Physics Major and Minor Plans**

(Note: In order to graduate with a baccalaureate degree, students must pass a total of 120 credits, including those needed to satisfy the General Education course requirements.)

*B.S. in Physics:* 51 credits in physics (including 9 credits of upper-level electives)  
34 credits in technical subjects outside of physics

*B.A. in Physics:* 46 credits in physics (including 9 credits of upper-level electives)  
26 credits in technical subjects outside of physics

*B.A. in Physics with teaching of science concentrations:*  
57-61 credits in physics, chemistry, mathematics  
(including 4-2 credits of upper-level physics electives)  
19 credits in education

*B.S. in Mathematical Physics:*  
40 credits in physics (including 3 credits of upper-level electives)  
38 credits in mathematics (including 3 credits of upper-level electives)

*B.S. in Computational Physics:*  
37 credits in physics  
27-30 credits in computer science  
23 credits in mathematics (including 3 credits of upper-level electives)

*Minor in Physics:*  
25 credits in physics (including 3 credits of upper-level electives)  
8 credits in mathematics