## PHYSICS (B.A.)

This program is intended to meet the needs of several kinds of students:

- students wishing to major in physics who have transferred to Wayne State University after one or two years at a community college, but whose background in physics and mathematics does not complement the content, level, or scheduling of remaining course requirements well enough to permit completion of the Bachelor of Science degree curriculum in a reasonable time;
- students who wish to pursue a general course of education in the sciences with physics as an area of concentration. Those who undertake such a program are sometimes interested in the study of physics as an integrated part of a broad educational background;
- students who decide relatively late in their college careers (for example, during the sophomore year) that they wish to major in physics.

It should be emphasized that completion of the Bachelor of Arts program instead of the Bachelor of Science program does not preclude later graduate work in physics. In most cases, it will mean that the student will spend part or all of his/her first year in graduate school making up deficiencies in his or her physics and mathematics background. Generally speaking, such deficiencies may be determined by consulting the Suggested Course Sequence of the Bachelor of Science degree in physics.

Admission requirements for this program are satisfied by the general requirements for undergraduate admission (http://bulletins.wayne.edu/undergraduate/general-information/admission/) to the University.

Candidates must complete 120 credits in course work including satisfaction of the University General Education Requirements (http://bulletins.wayne.edu/undergraduate/general-information/general-education/) and the College of Liberal Arts and Sciences Group Requirements (http://bulletins.wayne.edu/undergraduate/college-liberal-arts-sciences/bachelors-degree-requirements/), as well as the Departmental major requirements cited below. All course work must be completed in accordance with the regulations of the University (http://bulletins.wayne.edu/undergraduate/general-information/academic-regulations/) and the College (http://bulletins.wayne.edu/undergraduate/college-liberal-arts-sciences/academic-regulations/) governing undergraduate scholarship and degrees.

Students must receive a grade of C- or better in all physics and/or astronomy courses. A cumulative grade point average of 2.0 or higher for all course work is required for graduation.

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For the B.A. in physics, students must complete:

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Code	Title Cred	ιτs
PHY 2170 & PHY 2171	University Physics I for Scientists and Engineers and University Physics I Experimental Laboratory *	5
PHY 2180 & PHY 2181	University Physics II for Scientists and Engineers and University Physics II Experimental Laboratory *	5
PHY 3300 & PHY 3310	Introductory Modern Physics and Introductory Modern Physics Laboratory	5
PHY 3500	Introduction to Thermal and Fluid Physics	3
PHY 3750	Introduction to Computational Methods	1
PHY 5620 & PHY 5621	Electronics and Electrical Measurements and Electronics and Electrical Measurements Laboratory	5
PHY 6750	Applied Computational Methods	2
PHY 6850	Modern Physics Laboratory	2

<b>Total Credits</b>	47-49	
& CHM 1130	and General Chemistry I Laboratory	
CHM 1100	General Chemistry I	5
MAT 2020	Calculus II	4
MAT 2010	Calculus I	4
Two electives in physics, astronomy or mathematics		6-8

\* A student may present credits in PHY 2130, PHY 2140 or equivalent, in lieu of PHY 2170 and PHY 2180, with the consent of the Departmental Undergraduate advisor.

## Physics and Biomedical Physics Honors Program

Undergraduate majors, in both Physics and Biomedical Physics, with a minimum grade point average of 3.3 can enroll in the Honors program of the Department of Physics and Astronomy. Prospective students should consult the departmental Undergraduate Academic Advisor as soon as they declare their major to learn about specific requirements.

## **Physics AGRADE Program**

Seniors in Physics and Astronomy, with a minimum grade point average of 3.5, may enroll simultaneously in the undergraduate and graduate programs. These students can apply up to fifteen credits towards both the bachelors and masters degrees in physics. Contact Undergraduate Academic Advisor for further information.