

General Science



College of Science, Engineering and Mathematics

Department of Physics

(907) 474-6108

www.uaf.edu/physics/

Degrees: B.S., M.S.

Minimum Requirements for Degrees: B.S.: 130 credits; M.S.: 30 credits

The general science program provides a broad background in the natural sciences. The program allows specialization in at least two disciplines within the natural sciences as well as an additional area of associated interest. This degree offers more breadth in the natural sciences than other degree programs and may be classified as an interdisciplinary degree.

The general science program offers M.S. degrees in biological sciences, chemistry, geosciences and physics. The master's degree may be described as a breadth rather than a depth degree, and a candidate is ordinarily pursuing a course of study in which one of these disciplines is cooperating with at least one other discipline.

UNDERGRADUATE PROGRAM

MAJOR

General Science—B.S. Degree

- Complete the general university requirements (page 28).
- Complete the B.S. degree requirements (page 34).
- Complete the following program (major) requirements:*

BIOL 105X—Fundamentals of Biology I	4
BIOL 106X—Fundamentals of Biology II	4
CHEM 105X—General Chemistry**	4
CHEM 106X—General Chemistry**	4
GEOS 101X—The Dynamic Earth	4
GEOS 112X—The History of Earth and Life	4
MATH 107X—Functions for Calculus	3
MATH 108—Trigonometry	3
MATH 200X—Calculus***	4
PHYS 103X—College Physics**	4
PHYS 104X—College Physics**	4
- Select 1 of the following by the start of the junior year:****
 - Two majors.
 - One major and two minors.
- Complete 1 major from the following: biological sciences, chemistry, geosciences or physics. The major requires the completion of at least 20 credits in addition to the foundation courses in the discipline.* 20

- Complete 1 of the following:
 - Complete a second major from the following: biological sciences, chemistry, geosciences, physics or mathematics. The major requires the completion of at least 20 credits in addition to the foundation courses in the discipline.* 20
 - Complete 2 minors, one of which must be in the natural sciences or mathematics, while the other may be selected from the following disciplines: anthropology, English, French, German, Spanish, Russian, history, political science or economics. The minor must include 12 or more credits in addition to the foundation courses in that discipline.* 24
- Minimum credits required 130

* Student must earn a C grade or better in each course.

** PHYS 211X, 212X and 213X may substitute for PHYS 103X and 104X. CHEM 212 may substitute for CHEM 105X and 106X. Complete a B.S. degree mathematics elective for 3 credits if MATH 107X and MATH 108 are not taken.

*** A student does not need to take MATH 107X and MATH 108 if the student completes MATH 200X with a C or better.

**** A general science student, after meeting with his/her general science advisor, should contact the head of the major/minor department as early as possible to determine course requirements in that discipline. These courses will be determined by the department head of the discipline and will reflect the student's needs as well as the intent of the General Science program.

Note: One year of German or Russian is recommended.

GRADUATE PROGRAM

General Science—M.S. Degree

- Complete the following admissions requirement:
 - Complete a baccalaureate degree with a 3.0 GPA.
 - Complete the general university requirements (page 43).
 - Complete the master's degree requirements (page 46).
- At least 21 credits must be earned in science and mathematics. At least 12 credits must be earned in the major discipline selected. A thesis (maximum of 3 credits) or project (no credit) must be completed in the major discipline. It is not intended that the individual courses comprising the program merely satisfy the credit requirements; each course should contribute to the specific aim of the candidate, and the thesis or project should reflect this aim.
- Minimum credits required 30

See Physics, Applied.

See Physics, Computational.

See Physics.

See Space Physics.



University of Alaska Fairbanks

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