

INTEGRATED SCIENCE

isp.northwestern.edu

The Integrated Science Program is a highly selective curriculum of natural sciences and mathematics presented predominantly in small classes at an accelerated pace. Courses emphasize the common base and relationships between the traditional sciences, including the importance of mathematics and the development of first principles, leading to interdisciplinary topics at the forefront of science today. The goal is to provide students who are interested in careers in science and mathematics with a broad quantitative background that will give them superior preparation for further work in graduate or professional schools or permanent employment. The curriculum is composed of 25.7 units, up to 3 of which may be independent research, as well as a regular seminar series. Most students take advantage of the opportunity to pursue research in world-class laboratories at Northwestern and are able to publish peer-reviewed papers in professional journals. For Weinberg College students ISP may lead to a three-year bachelor of arts degree if, by the end of the third year, the student has completed 38.7 or more units and satisfied all other college requirements.

Students must be accepted to Northwestern to be eligible for admission to ISP, which requires a separate application to the program director. For more information on admission procedures, see Special Admission Programs (<https://catalogs.northwestern.edu/undergraduate/admission>). Also see the ISP website for the required AP and achievement tests.

The ISP curriculum consists of specially designed courses taught by faculty members of science and mathematics departments. Course descriptions are found in the appropriate departments in this catalog. Though listed in a three-year format, the program is often spread over four years, particularly if a student wishes to combine an ISP major with a second major in a traditional department, such as biological sciences, chemistry, computer science, environmental sciences, earth and planetary sciences, materials science, mathematics, neuroscience, physics, psychology, or in an engineering field. Specific second-major requirements for ISP students can be found on the program website and under individual departments in this catalog.

Program of Study

- Integrated Science Major (<https://catalogs.northwestern.edu/undergraduate/arts-sciences/integrated-science/integrated-science-major>)

INTG_SCI 101-1 Computing Applications (0.5 Unit) Introduction to the formulation and solution of scientific problems using advanced computational programming methods.

INTG_SCI 101-2 Computing Applications (0.5 Unit) Introduction to the formulation and solution of scientific problems using advanced computational programming methods.

INTG_SCI 101-6 First-Year Seminar (1 Unit)

INTG_SCI 398-0 Undergraduate Research (1 Unit) Advanced independent study and research for superior students. Consent of ISP director required.