INTEGRATED SCIENCE MAJOR

Students must also complete the Undergraduate Registration Requirement (https://catalogs.northwestern.edu/undergraduate/requirements-policies/undergraduate-registration-requirement/) and the degree requirements of their home school.

NOTE: This Catalog describes Weinberg College BA requirements that pertain to students who matriculated at Northwestern after spring quarter 2023. Refer to the Archives (https://catalogs.northwestern.edu/archives/) if you are following BA requirements described in the 2018-2019 through 2022-2023 editions.

Course	Title
Major Requirements (25.7 units)	
First Year	
COMP_SCI 111-0	Fundamentals of Computer Programming
CHEM 171-0 & CHEM 181-0 & CHEM 172-0 & CHEM 182-0	Advanced General Inorganic Chemistry and Advanced General Inorganic Chemistry Laboratory and Advanced General Physical Chemistry and Advanced General Physical Chemistry Laboratory
MATH 281-1 & MATH 281-2 & MATH 281-3	Accelerated Mathematics for ISP. First Year and Accelerated Mathematics for ISP. First Year and Accelerated Mathematics for ISP. First Year
PHYSICS 125-1 & PHYSICS 125-2 & PHYSICS 125-3 & PHYSICS 126-1 & PHYSICS 126-2 & PHYSICS 126-3	General Physics ISP and General Physics for ISP and General Physics for ISP and Physics Laboratory for ISP and Physics Laboratory for ISP and Physics Laboratory for ISP
Second Year	
BIOL_SCI 240-0 & BIOL_SCI 241-0	Biochemistry, Molecular and Cell Biology for ISP - 1 and Biochemistry, Molecular and Cell Biology for ISP - 2
BIOL_SCI 232-0	Molecular and Cellular Processes Laboratory
BIOL_SCI 233-0	Genetics and Molecular Processes Laboratory
CHEM 217-1 & CHEM 237-1	Accelerated Organic Chemistry I and Accelerated Organic Chemistry Laboratory I
CHEM 348-0	Physical Chemistry for ISP
EARTH 350-0	Physics of the Earth for ISP
MATH 381-0	Fourier Analysis and Boundary Value Problems for ISP
MATH 382-0	Complex Analysis for ISP
PHYSICS 339-1 & PHYSICS 339-2	Quantum Mechanics and Quantum Mechanics
Third Year	
ASTRON 331-0	Astrophysics for ISP
Required 300-level BIOL_SCI course [1]	
NEUROSCI 311-0	Biophysical Analysis of Neurons for ISP
PHYSICS 337-0	Physics of Condensed Matter
or PHYSICS 339-3	Particle and Nuclear Physics
STAT 383-0	Probability and Statistics for ISP

[1] One of these 8 courses: BIOL_SCI 323-0 Bioinformatics: Sequence and Structure Analysis, BIOL_SCI 341-0 Population Genetics, BIOL_SCI 361-0 Protein Structure and Function, BIOL_SCI 390-0 Molecular Biology of Genome Editing and Engineering, BIOL_SCI 337-0 Biostatistics, BIOL_SCI 338-0 Modeling Biological Dynamics, BIOL_SCI 354-0 Systems Biology, or BIOL_SCI 363-0 Biophysics.

Course	Title
With permission, Undergraduate Research (INTG_SCI 398-0) may be substituted for up to 3 of the following courses:	
ASTRON 331-0	Astrophysics for ISP
Required 300-level BIOL_SCI course	
MATH 382-0	Complex Analysis for ISP
NEUROSCI 311-0	Biophysical Analysis of Neurons for ISP
PHYSICS 337-0	Physics of Condensed Matter
or PHYSICS 339-3	Particle and Nuclear Physics

Honors in Integrated Science

Students eligible to pursue honors based on their overall performance in ISP courses will be so informed no later than fall quarter of senior year. Those who choose to pursue honors must then enroll with a faculty research adviser in at least 2 quarters of Undergraduate Research either in ISP (INTG_SCI 398-0) or an ISP-affiliated department (some of these credits may count toward the major; see the program director for details). At the beginning of May eligible students submit a senior thesis describing their research activities for consideration by the ISP committee.

Students whose theses and grades meet program criteria are recommended to the college for graduation with honors. For more information consult the program director and see Honors in the Major (https://catalogs.northwestern.edu/undergraduate/arts-sciences/#academicoptionstext).