STATISTICS 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.

Requirements for the Statistics Major

Department Courses (p. 1) (10 units); includes 3 electives (p. 1)

Related Courses (p. 1) (may be double-counted with another major, or with a minor). Related courses in mathematics MUST be taken EARLY in the program of study; includes prerequisites for required department courses.

Related Course Requirement

In addition to the 10 department courses, students must complete related courses in mathematics; see list below. Related courses in mathematics MUST be taken EARLY in the program of study; these are prerequisite courses for required department courses.

Related courses required for the major

Course Title
MATH 220-1 Single-Variable Differential Calculus
MATH 220-2 Single-Variable Integral Calculus
MATH 218-1 Single-Variable Calculus with Precalculus
MATH 218-2 Single-Variable Calculus with Precalculus
MATH 218-3 Single-Variable Calculus with Precalculus
MATH 230-1 Multivariable Differential Calculus
Statistics Major

or MATH 228-1 Multivariable Differential Calculus for Engineering
or MATH 281-1 Accelerated Mathematics for ISP: First Year
or MATH 285-1 Accelerated Mathematics for MMSS: First Year
or MATH 290-2 MENU: Linear Algebra and Multivariable Calculus
or MATH 291-2 MENU: Intensive Linear Algebra and Multivariable Calculus

MATH 226-0 & MATH 230-2 Sequences and Series
or STAT 228-0 Series and Multiple Integrals
or MATH 235-0 Series and Multiple Integrals
or MATH 226-0 & MATH 228-2 Sequences and Series and Multivariable Integral Calculus for Engineering
or MATH 226-0 & MATH 281-2 Sequences and Series and Accelerated Mathematics for ISP: First Year
or MATH 226-0 & MATH 285-2 Sequences and Series and Accelerated Mathematics for MMSS: First Year
or MATH 226-0 & MATH 290-2 Sequences and Series and MENU: Linear Algebra and Multivariable Calculus
or MATH 226-0 & MATH 291-2 Sequences and Series and MENU: Intensive Linear Algebra and Multivariable Calculus

MATH 240-0 Linear Algebra
or MATH 281-3 Accelerated Mathematics for ISP: First Year
or MATH 285-1 Accelerated Mathematics for MMSS: First Year
or MATH 290-1 MENU: Linear Algebra and Multivariable Calculus
or MATH 291-1 MENU: Intensive Linear Algebra and Multivariable Calculus
or GEN_ENG 205-1 Engineering Analysis I

The Statistics Major with Additional Majors or Minors

The major in Statistics fulfills the Weinberg College requirement of completion of a major, but it also can be completed alongside another major, or with a minor. The general Weinberg College policies apply to such combinations. Below is clarifying text about how this works with certain combinations, and where particular exceptions to general rules are approved.

The Statistics Major for Students in the Integrated Science Program

Students complete all requirements for ISP major, and requirements for Statistics major are modified as follows:

• Introductory Statistics course requirement: STAT 202-0, STAT 210-0, STAT 232-0 or equivalent is waived
• MATH 226-0 is waived
• MATH 385-0 Probability and Statistics for MMSS counts in place of STAT 320-1
• STAT 350-0 is replaced by a combination of MATH 386-1 Econometrics for MMSS and MATH 386-2 Econometrics for MMSS
• MMSS students required to take either STAT 348-0 or STAT 354-0 (STAT 351-0 eligible to be applied as an elective only)

All other statistics major course requirements remain the same.

For triple major limitations see MMSS Adjunct Major (https://catalogs.northwestern.edu/undergraduate/arts-sciences/mathematical-methods-social-sciences/mmss-adjunct-major/)

Statistics Major with a Data Science Major

see Data Science Major (https://catalogs.northwestern.edu/undergraduate/arts-sciences/statistics-data-science/data-science-major/)

Statistics Major with a Data Science Minor

see Data Science Minor (https://catalogs.northwestern.edu/undergraduate/arts-sciences/statistics-data-science/data-science-minor/)

Honors in Statistics

 Majors with strong academic records and an interest in pursuing honors should contact the Director of Undergraduate Studies no later than the start of senior year. Accepted students take 2 quarters of STAT 399-0 Independent Study, during which they develop and write a research paper; these enrollments do not count toward the major.

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