STATISTICS MINOR

Students who complete the minor in statistics receive serious exposure to probability theory, statistical estimation theory, statistical analysis, and the design of statistical data collection.

Prerequisites for the Minor

Students choosing to minor in statistics are required to complete prerequisite courses in mathematics. Some may be completed concurrently with the 7 courses for the minor.

Course and Title

Prerequisite courses (units vary by sequence)

MATH 220-1 & MATH 220-2
Single-Variable Differential Calculus
and Single-Variable Integral Calculus

or MATH 218-1 & MATH 218-2
and Single-Variable Calculus with Precalculus

MATH 230-1
Multivariable Differential Calculus

or MATH 228-1
Multivariable Differential Calculus for Engineering

MATH 230-2
Single-Variable Calculus with Precalculus

or MATH 226-0
and Single-Variable Calculus with Precalculus

or MATH 226-0
Accelerated Mathematics for ISP First Year

MATH 285-2
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
and Multivariable Integral Calculus

or STAT 228-0
and Series and Multiple Integrals

or MATH 235-0
and Series and Multiple Integrals

or MATH 226-0
Sequences and Series

& MATH 228-2
and Multivariable Integral Calculus for Engineering

or MATH 226-0
Sequences and Series

& MATH 281-2
and Accelerated Mathematics for ISP First Year

or MATH 226-0
Sequences and Series

& MATH 285-3
and Accelerated Mathematics for MMSS: First Year

or MATH 226-0
Sequences and Series

& MATH 290-3
and MENU: Linear Algebra and Multivariable Calculus

or MATH 226-0
Sequences and Series

& MATH 291-3
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

5 core courses

STAT 320-1
Statistical Theory & Methods 1

or STAT 383-0
Probability and Statistics for ISP

or MATH 310-1
Probability and Stochastic Processes

or MATH 311-1
MENU: Probability and Stochastic Processes

or MATH 314-0
Probability and Statistics for Econometrics

or MATH 385-0
Probability and Statistics for MMSS

or ELEC_ENG 302-0
Probabilistic Systems

or IEMS 302-0
Probability

1 List of topics not covered in substitute courses can be found on the department website (https://statistics.northwestern.edu/undergraduate/).

The Statistics Minor in Relation to Majors

The minor in Statistics can be completed along with any major. The general Weinberg College policies about major/minor pairings apply. Below is clarifying text about how this works with certain majors, and where particular exceptions to general rules are approved.

The Statistics Minor for Students in the Integrated Science Program

Students complete all requirements for ISP major, and requirements for Statistics minor 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
• STAT 383-0 Probability and Statistics for ISP counts in place of STAT 320-1
• ISP students required to take either STAT 348-0 or STAT 354-0 (STAT 351-0 may not be applied to the minor)

All other statistics minor course requirements remain the same.

The Statistics Minor for Students in the Mathematical Methods in the Social Sciences Program

Students complete all requirements for the MMSS adjunct major, and requirements for the Statistics minor 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 may not be applied to the minor)

All other statistics minor course requirements remain the same.

**Statistics Minor and the Data Science Major**

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