STATISTICS, MINOR

The aim of statistical modeling is to empower effective decision making, and the field's unique contribution is its ability to incorporate multiple levels of uncertainty in the framing of wise decisions. Over the last few years, the development of new computational tools and the unprecedented evolution of "big data" have propelled statistical modeling to new levels. Today, statistical modeling and machine learning have reached a level of impact that no large organization can afford to ignore. The information landscape is changing as it has never changed before.

Students interested in this minor must have the prior approval of the Statistics Undergraduate Program Director, Professor Abraham Wyner (ajw@wharton.upenn.edu), to develop a curriculum for the minor that is appropriate for their interests. Wharton students are **not eligible** for this minor.

For more information: https://statistics.wharton.upenn.edu/programs/undergraduate/statistics-minor/

The degree and major requirements displayed are intended as a guide for students entering in the Fall of 2022 and later. Students should consult with their academic program regarding final certifications and requirements for graduation.

Statistics, Minor

This minor is for students outside of Wharton. Single-degree and dual-degree students with Wharton may pursue a statistics concentration instead.

Code	Title	Course Units
Pre-Requisites [1]		
MATH 1410	Calculus, Part II	1
or MATH 1510	Calculus, Part II with Probability and Matrices	
Select one of the following:		2
STAT 1010 & STAT 1020	Introductory Business Statistics and Introductory Business Statistics	
STAT 1110 & STAT 1120	Introductory Statistics and Introductory Statistics	
STAT 4300 & STAT 4310	Probability and Statistical Inference	
ESE 3010 & ESE 4020	Engineering Probability and Statistics for Data Science	
Core Course		
STAT 4300	Probability	1
Electives		
Select 2 course units of STAT courses		2
Select 1 course unit of STAT or other approved course		1
Additional Elective [2]		
Total Course Units		**7**

[1]

The statistics prerequisite may also be satisfied with 2 course units of Economic Statistics, such as ECON 2300 and 2310. These students do not need to take any other introductory courses, but they must take all upper-level course from within the Statistics Department.

[2]

Since STAT 4300 is also a core course, students who complete STAT 4300 Probability and STAT 4310 Statistical Inference as an introductory sequence must complete four additional electives for the minor.