

# Minor in Statistics

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The statistics minor has a minimum requirement of 34 credits. The minor in statistics consists of 8 required courses (28 units) and 2 elective courses (6 units). Our goal with the statistics minor is to offer a concentrated applied and theoretical curriculum. The statistics minor is suitable for chemistry, computer science & engineering, mathematics, and physics majors who already complete coursework in Calculus and/or Statistics with Applications. Upon completion of this program, students will

1. understand fundamental theoretical and applied principles of statistics needed for the job market.
2. acquire programming skills required for data analysis.
3. be able to communicate effective statistical concepts to statisticians and non-statisticians, both verbally and in writing.
4. be able to effectively conduct quantitative analyses which is compliant with industry and academic standards.

## Requirements for a minor in Statistics (34 units)

### Lower-division Requirements (19)

MATH 2210	Calculus I	4
MATH 2220	Calculus II	4
MATH 2265	Statistics with Applications	3
MATH 2310	Applied Linear Algebra	4
MATH 2320	Multivariable Calculus	4

### Upper-division Requirements (9)

MATH 3460	Probability Theory	3
MATH 3465	Computational Statistics	3
MATH 4360	Linear Statistical Models	3

### Electives (6)

Two courses chosen from the following, with at least one MATH course. MATH 5510 may count towards elective units with departmental permission.

MATH 5360	Statistical Methods for Machine Learning	6
MATH 5565	Mathematical Statistics	
IST 2510	Big Data Analytics	
HSCI 3205	Biostatistics for Health Science	
PSYC 4410	Advanced Psychological Statistics	
BIOL 5050	Biostatistics and Experimental Design	

**Total Units** **34**