

College of Science
Minor in **Statistics**

Check sheet for students graduating in calendar year **2021**

A total of 21 credit hours are required, structured as follows:

- I. Complete **one** statistics sequence by selecting one course from both Ia and Ib (6 Credits):
- Ia. First Course in sequence:
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|------------------------|--|--------|
| STAT 3005 | Statistical Methods (Pre: MATH 1225) (Co: MATH 1226). | (3)() |
| STAT 3615 ¹ | Biological Statistics | (3)() |
| STAT 4705 | Probability and Statistics for Engineers (Pre: Math 2204 or MATH 2224 or MATH 2204H or MATH 2406H) | (3)() |
| *CMDA 2005 | Integrated Quantitative Science (Pre: CS 1114 and MATH 1226) | (6)() |
- Ib. Second Course in sequence:
- | | | |
|------------|--|--------|
| STAT 3006 | Statistical Methods (Pre: STAT 3005) | (3)() |
| STAT 3616 | Biological Statistics (Pre: STAT 3615) | (3)() |
| STAT 4706 | Probability and Statistics for Engineers (Pre: STAT 4705) | (3)() |
| *CMDA 2006 | Integrated Quantitative Science (Pre: CMDA 2005 and MATH 2114) | (6)() |
- *If CMDA 2005-2006 is chosen, the total hours to complete the minor will increase to 27.
- II. Complete **one** course from the following (3 credits):
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|-----------|---|--------|
| STAT 4204 | Experimental Designs (Pre: STAT 3006 or 3616 or 4106 or 4706) | (3)() |
| STAT 4214 | Methods of Regression Analysis (Pre: STAT 3006 or 3616 or 4106 or 4706) | (3)() |
- Note: If 4204 or 4214 is taken to complete section II, it cannot also satisfy section III.
- III. Complete at least **four** courses from the following (12 credits minimum):
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|-------------------|--|--------|
| STAT 3504 | Nonparametric Statistics (Pre: STAT 3006 or 3616 or 4106 or 4604 or 4706) | (3)() |
| STAT/CMDA/CS 3654 | Introductory Data Analytics and Visualization (Pre: CMDA 2006 or equivalent) | (3)() |
| STAT 4004 | Methods of Statistical Computing (Pre: STAT 4105, 4214) | (3)() |
| STAT 4204 | Experimental Designs (Pre: STAT 3006 or 3616 or 4106 or 4706 or CMDA 2006) | (3)() |
| STAT 4214 | Methods of Regression Analysis (Pre: STAT 3006 or 3616 or 4106 or 4706 or 5606 or 5616 or CMDA 2006) | (3)() |
| STAT 4364 | Introduction to Statistical Genomics (Pre: (MATH 2204, (STAT 3104 or STAT 4105 or STAT 4705), (STAT 3006 or STAT 3616 or STAT 4706)) or CMDA 2006) | (3)() |
| STAT 4444 | Applied Bayesian Statistics (Pre: (MATH 2204, (STAT 3104 or STAT 4105 or STAT 4705), (STAT 3006 or STAT 3616 or STAT 4706)) or CMDA 2006) | (3)() |
| STAT 4504 | Applied Multivariate Statistics (Pre: STAT 3006 or 4706 or 5606 or 5616 or CMDA 2006) | (3)() |
| STAT 4514 | Contingency Table Analysis (Pre: STAT 3006 or 3616 or 4106 or 4706) | (3)() |

STAT 4524	Sample Survey Methods (Pre: STAT 3006 or 3616 or 4106 or 4706)	(3)()
STAT 4534	Applied Time Series Analysis (Pre: STAT 3006 or 4104 or 4706 or 4714 or 3616 or BIT 2406 or CMDA 2006)	(3)()
STAT/CMDA/CS 4654	Intermediate Data Analytics and Machine Learning (Pre: STAT/CMDA/CS 3654)	(3)()
STAT/CMDA 4664	Computational Intensive Stochastic Modeling (Pre: CMDA 2006 or equivalent)	(3)()
STAT/AAEC 4804 ²	Elementary Econometrics (Pre: (STAT 3005 or 3604), AAEC 1006)	(3)()
ISE 4404	Statistical Quality Control (Pre: ISE 3414, STAT 4105, STAT 4706)	(3)()
MATH 4454	Applied Mathematical Modeling	(3)()

Footnotes:

- 1 If a student completed STAT 3604 prior to becoming a minor, it may replace STAT 3615. Also, note prerequisite courses for Section III.
- 2 For students completing a major or minor in Economics, ECON 4304, Introduction to Econometric Methods, can be substituted for STAT 4804.

Other notes:

- A minor GPA of 2.0 or higher must be attained in the courses counting toward the minor.
- **IMPORTANT:** Students are responsible for reading the course catalogue descriptions regarding the duplicate course list and prerequisites.