College of Science
Minor in **Statistics**
Check sheet for students graduating in calendar year **2020**

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:

STAT 3005[5]	Statistical Methods (Pre: MATH 1225[8]) (Co: MATH 1226[8]).	(3)( )
STAT 3615[1]	Biological Statistics	(3)( )
STAT 4705[2,3]	Probability and Statistics for Engineers (Pre: MATH 2204[7])	(3)( )

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)( )

II. Complete **one** course from the following (3 credits):

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 count for 3 credits in section III.

III. Complete at least **four** courses from the following (12 credits minimum):

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[6]	Introduction to Statistical Genomics	(3)( )
STAT 4444	Applied Bayesian Statistics (Pre: (MATH 2204[7], (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[4]	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 If a student completed Stat 4714 or 4105 prior to becoming a minor, it may replace Stat 4705.
3 Stat 4705 has a pre-requisite of Math 2204[7] Multivariate Calculus.

4 For students completing a major or minor in Economics, ECON 4304, Introduction to Econometric Methods, can be substituted for STAT 4804.
5 If credit for STAT 3005 was awarded from an AP Statistics exam, the student satisfies 3 credits for Section I (as if they took STAT 3005)
6 Pre: (MATH 2204[8], (STAT 3104 or STAT 4105 or STAT 4705), (STAT 3006 or STAT 3616 or STAT 4706)) or CMDA 2006,
7 MATH 2204 or any of the following equivalent courses: MATH 2224, MATH 2224H, MATH 2204H, MATH 2406H or CMDA 2005.
8 MATH 1225-1226 is equivalent to taking all of the following: MATH 1205, MATH 1206, MATH 1224.

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 prequisites.