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\textsuperscript{5} Statistical Methods (Pre: MATH 1225\textsuperscript{5}) (Co: MATH 1226\textsuperscript{5}). (3) 
       STAT 3615\textsuperscript{1} Biological Statistics (3) 
       STAT 4705\textsuperscript{2,3} Probability and Statistics for Engineers (Pre: MATH 2204\textsuperscript{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\textsuperscript{6} Introduction to Statistical Genomics (3) 
   STAT 4444 Applied Bayesian Statistics (Pre: (MATH 2204\textsuperscript{7}, (STAT 3104 or STAT 4105 or STAT 4705), (STAT 3006 or 3616 or 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\textsuperscript{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\textsuperscript{7} Multivariate Calculus.
For students completing a major or minor in Economics, ECON 4304, Introduction to Econometric Methods, can be substituted for STAT 4804.

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)

Pre: (MATH 2204A, (STAT 3104 or STAT 4105 or STAT 4705), (STAT 3006 or STAT 3616 or STAT 4706)) or CMDA 2006,

MATH 2204 or any of the following equivalent courses: MATH 2224, MATH 2224H, MATH 2204H, MATH 2406H or CMDA 2005.

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 prerequisites.