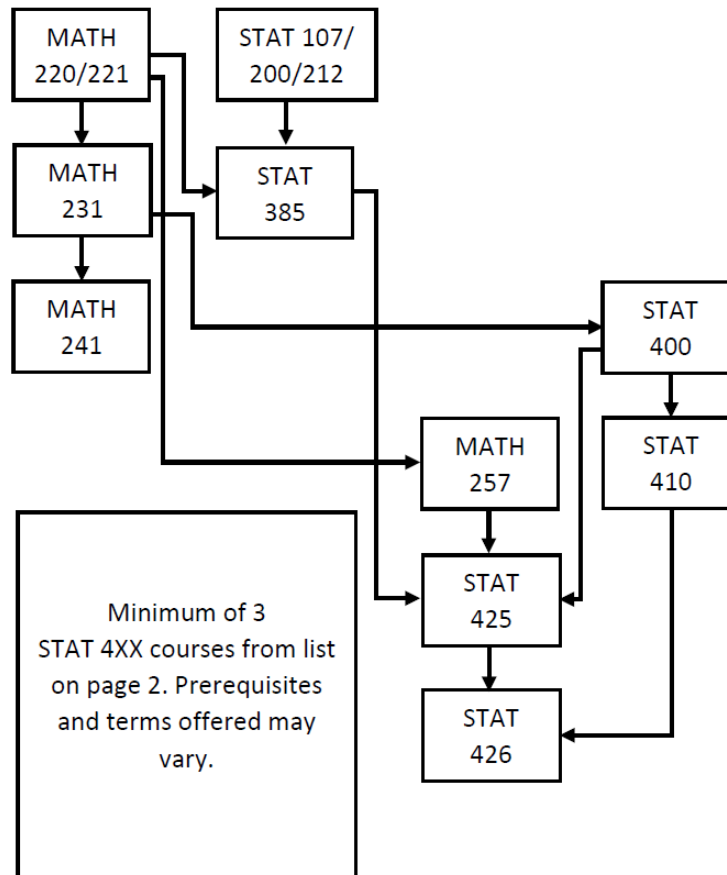


Worksheet for the Statistics Major

Major Prerequisite Flow Chart:

The flow chart below outlines all the required course work in the Statistics major, and shows the progression through prerequisites for each requirement.



Calculus Sequence (11-12 hrs)
<ul style="list-style-type: none"> •MATH 220 <i>Calculus</i> or MATH 221 <i>Calculus I</i> •MATH 231 <i>Calculus II</i> •MATH 241 <i>Calculus III</i>

Statistics Foundations (6-7 hrs)
<ul style="list-style-type: none"> •STAT 107 <i>Data Science Discovery</i> or STAT 200 <i>Statistical Analysis</i> or STAT 212 <i>Biostatistics</i> •STAT 385 <i>Statistical Programming Methods</i>

Mathematical Statistics & Probability (6-8 hrs)
<ul style="list-style-type: none"> •STAT 400* <i>Statistics & Probability I</i> or ASRM 401 <i>Actuarial Statistics I</i> or MATH 461 <i>Probability Theory</i> •STAT 410* <i>Statistics & Probability II</i> or ASRM 402 <i>Actuarial Statistics II</i>

Statistical Modeling (9 hrs)
<ul style="list-style-type: none"> •MATH 257* <i>Linear Algebra with Computational Applications</i> or MATH 415, MATH 416, or ASRM 406 •STAT 425 <i>Statistical Modeling I</i> •STAT 426 <i>Statistical Modeling II</i>

*preferred course

Advanced Electives in Statistics

Elective Courses	Title	Prerequisite (* = corequisite)	Semester Offered[#]
STAT 385	Statistical Programming Methods	STAT 107/200/212	Fa, Sp
STAT 424	Design of Experiments	STAT 410, MATH 415	Sp
STAT 427	Statistical Consulting	STAT 425	Sp
STAT 428	Statistical Computing	STAT 410	Fa, Sp
STAT 429	Time Series Analysis	STAT 410	Fa, Sp
STAT 430	Topics in Applied Statistics	varies	Fa, Sp
STAT 431	Applied Bayesian Analysis	STAT 410, R	Fa, Sp
STAT 432	Basics of Statistical Learning	STAT 425	Fa, Sp
STAT 433	Stochastic Processes	STAT 400, MATH 415	Fa, Sp
STAT 434	Survival Analysis	STAT 410 and 425	Fa
STAT 440	Statistical Data Management	STAT 400	Fa, Sp
STAT 443	Professional Statistics	STAT 420	Fa, Sp
STAT 447	Data Science Programming Methods	STAT 410, R	Fa
STAT 448	Advanced Data Analysis	STAT 410*	Fa, Sp, Su
STAT 480	Data Science Foundations	STAT 425**	Fa
MATH 444/447	Elm.Real Analysis/Real Variables	MATH 347	Fa, Sp, Su

*Co-requisite

**Requires proficiency in high-level programming language like Python, C++

Based on recent history; future schedules may differ.

Notes: