Department of Mathematics and Statistics
Bachelor of Science in Mathematics (Statistics and Data Science)
Major Code: STAT
Effective Date: 2020-2021 Academic Year

Curriculum Guide

Course	CR	Course	CR
Freshman Year: First Semester		**Freshman Year: Second Semester**	
MATH 131: Calculus I *(MLAR)*	4	MATH 132: Calculus II *(MLAR)*	4
MATH 105: Ori for Fr and New Math Major	1	MATH 140[3]: Fund Sci Prog Python	3
ENGL 100: Ideas and Their Expressions I *(WC)*	3	ENGL 101: Ideas and Their Expressions II *(WC)*	3
Social/Behavioral Sciences[1] *(SBS)*	3	MATH 123: Discrete Mathematics I	3
Global Awareness[2] *(GA)*	3	MATH 106: Intro Math Reason Prob Solv	1
FRST 101: College Success *(SS)*	1	African American History and Culture[4] *(AA)*	3
Semester Total	**15**	**Semester Total**	**17**
Sophomore Year: First Semester		**Sophomore Year: Second Semester**	
MATH 231: Calculus III	4	MATH 211: Mathematical Logic & Proof Tec	4
STAT 240: Data Exploration & Vis	3	PHYS 242: General Physics II *(SR)*	3
MATH 224: Intro Probability & Statistics	3	PHYS 252: General Physics II Lab *(SR)*	1
PHYS 241: General Physics I *(SR)*	3	STAT 324: Stat Methods for Data Analysis	3
PHYS 251: General Physics I Lab *(SR)*	1	SPCH 250: Speech Fundamentals *(HFA)*	3
MATH 215: Intro to Math Lit and Re Tools	1		
Semester Total	**15**	**Semester Total**	**14**
Junior Year: First Semester		**Junior Year: Second Semester**	
MATH 377: Intermediate Analysis I	3	STAT 334: Statistical Inference	3
MATH 351: Linear Algebra & Matrix Theo	3	MATH 341: Intro Differential Equations	3
MATH 365: Introduction to Data Science	3	STAT 328: Statistical Machine Learning I	3
STAT 327: Regression Analysis	3	STAT 337: Experimental Design & Sampling	3
STAT 333: Probability Theory Appl	3	Foreign Language[5]/Elective	3
Semester Total	**15**	**Semester Total**	**15**
Senior Year: First Semester		**Senior Year: Second Semester**	
Ethical Reasoning Elective[6]	3	MATH 496: Capstone Experience in Math	3
STAT 428: Statistical Machine Learning II	3	STAT 425: Computational Statistics	3
MATH 320: History of Mathematics	3	Electives	8
Foreign Language[5]/Elective	3		
Elective	3		
Semester Total	**15**	**Semester Total**	**14**

Total Credit Hours: 120

[1] One course from: BUED 279, ECON 200 or 201, FCS 135, 181 or 260, or HIST 103, 104, 105, 106, 107, 130, 206, 207, or 216, JOMC 240, POLI 110, PSYC 101, or SOCI 100 or 200, or SSFM 226.

[2] One course from: HIST 130, 206, 207, 216 or 231, or MGMT 221, or PHIL 103 or 201.
[3] For students starting in Math 103, Math 104, or Math 110, the programming courses should be replaced with electives in the first year. Then MATH 140 and STAT 240 should be taken prior to MATH 365. See the Mathematics Student Handbook for a sample program guide.
[4] One course from: ENGL 211 or 212, or HIST 103, 106 or 107, or LIBS 202, or MUSI 220.
[5] Two courses of FREN 101, FREN 102; **or** GERM 101, GERM 102; **or** SPAN 101, SPAN 102; **or** RUSS 101, RUSS102 taken in sequence.
[6] One course from: PHIL 104, 201, 263, 316, 317, or 320.

MAJOR PROGRAM REQUIREMENTS

A student must earn a C or better grade except one passing grade below C if the student has GPA of at least 2.0 but less than 2.3, or two passing grades below C if the student has GPA of at least 2.3 in the following courses:

Course	Course
MATH 105	MATH 365
MATH 106	MATH 377
MATH 123	MATH 496
MATH 131	STAT 240
MATH 132	STAT 324
MATH 211	STAT 327
MATH 215	STAT 328
MATH 224	STAT 333
MATH 231	STAT 334
MATH 320	STAT 337
MATH 341	STAT 425
MATH 351	STAT 428