

**2021-2022 Degree Map-Bachelor of Science in Applied Statistics: Data Science option**

 This map is a term-by-term sample course schedule. The Sample Schedule serves as a general guideline to help you build a full schedule each term. See course descriptions and prerequisites at <http://www.atu.edu/catalog/>
**Possible careers include: Data Scientist, Data Analyst, Business Analyst, Quantitative Analyst, Statistical Analyst, Statistical Programmer, Statistician, Operation research analyst**

#Prerequisite Courses: ENGL 0303 \_\_\_\_\_ MATH 0803 \_\_\_\_\_ MATH 1003 \_\_\_\_\_ MATH 0903 \_\_\_\_\_ MATH 1110 \_\_\_\_\_ MATH 1203 \_\_\_\_\_ MATH 1914 \_\_\_\_\_

Sample Schedule	Milestones/Notes		
Semester 1	Hrs.	Grade	Semester 1
ENGL 1013- Comp I (ACTS=ENGL 1013)	3	#	
U.S. History & Government	3		
MATH 1001- Orientation to Mathematics	1		
MATH 2914- Calculus I (ACTS= MATH 2405)	4	#	# C or > required for Gen Ed.
BUAD 2003- Business Information Systems	3		
General Elective	1		
Total hours	15	GPA	

Semester 2	Hrs.	Grade	Semester 2
ENGL 1023- Comp II (ACTS= ENGL 1023)	3	#	
Fine Arts & Humanities	3		
BDA 2003- Business Problem Solving	3		
MATH 2924- Calculus II (ACTS= MATH2505)	4		
STAT 2303- Statistical Methods	3		
Total hours	16	GPA	

Semester 3	Hrs.	Grade	Semester 3
Social Science	3		
MATH 2703- Discrete Mathematics	3		
MATH 2934- Calculus III (ACTS= MATH 2603)	4		
STAT 3153- Applied Statistics	3		
*General Elective (See Note 1)	3		SEE Catalog
Total hours	16	GPA	

Semester 4	Hrs.	Grade	Semester 4
BDA 3053- Business Data Analysis	3		
COMS 2104- Foundations of Computer Prog. I	4		
MATH 3243- Differential Equations I	3		
STAT 3113- Regression analysis	3		
*General Elective (See Note 1)	3		SEE Catalog
Total hours	16	GPA	MATH ADVISOR ASSIGNED

 The Arkansas Course Transfer System (ACTS) is designed to assist in planning the academic progress of students. This system contains information about the transferability of courses within Arkansas public colleges and universities. The Arkansas Course Transfer System can be accessed at <https://www.adhe.edu/students-parents/colleges-universities/transfer-info.-for-students/>
**Note 1:** Select courses from: STAT 3183, MATH 4123, or MATH/STAT course at 3000-4000 approved by advisor.

<b>Fine Arts and Humanities</b> ART 2123 Experiencing Art (ACTS=ARTA1003) MUS 2003 Introduction to Music (ACTS=MUSC1003) TH 2273 Introduction to Theatre (ACTS=DRAM 1003) ENGL 2173 Introduction to Film JOUR 2173 Introduction to Film ENGL 2183 Honors Introduction to Film ENGL 2003 Introduction to World Literature (ACTS=ENGL2113) ENGL 2013 Intro. to American Literature (ACTS=ENGL2653) ENGL 2023 Honors World Literature PHIL 2003 Introduction to Philosophy (ACTS=PHIL1103) PHIL 2043 Honors Introduction to Philosophy PHIL 2053 Introduction to Critical Thinking (ACTS=PHIL 1003)	<b>U.S. History &amp; Government</b> HIST 1903 Survey of American History HIST 2003 United States History to 1877 (ACTS=HIST2113) HIST 2043 Honors United States History to 1877 HIST 2013 United States History since 1877 (ACTS=HIST2123) POLS 2003 American Government (ACTS=PLSC2003)
	<b>Communication Courses</b> COMM 1003 Intro to Speech Comm COMM 2003 Public Speaking COMM 2173 Business and Professional Speaking

Sample Schedule	Milestones/Notes		
Semester 5	Hrs.	Grade	Semester 5
Fine Arts & Humanities	3		
Science with lab	4		
COMS 2203- Foundations of Computer Prog II	3		
MATH 4003- Linear Algebra I	3		
STAT 4163- Mathematical Statistics	3		
Total hours	16	GPA	

Semester 6	Hrs.	Grade	Semester 6
COMM 2173- Business & Professional Speaking	3		
Science with lab	4		
COMS 2213- Data Structures	3		
STAT 4153- Experimental Design and Analysis	3		
MATH/STAT Elective (3000-4000) SEE Catalog	3		SEE Catalog
Total hours	16	GPA	APPLY FOR GRADUATION

Semester 7	Hrs.	Grade	Semester 7
Social Science	3		
STAT 4113- Categorical Data Analysis	3		
COMS Elective (3000-4000)	3		SEE Catalog
General Elective	3		
Total hours	12	GPA	

Semester 8	Hrs.	Grade	Semester 8
MATH 4971- Mathematics Senior Seminar	1		
COMS Elective (3000-4000) SEE catalog	3		<b>Graduation Requirements:</b> Min. hours 3000-4000 level courses: 40 No more than 4 PE activity hours Min. hours required:120 2.00+ GPA No more than 12 hours of "D" grades
MATH/STAT Elective (3000-4000) SEE catalog	3		
MATH/STAT Elective (3000-4000) SEE catalog	3		
General Elective	3		
Total Hours	13	GPA	

General Electives: 6 hours (1000-4000 level)

# indicates a "C" or better is required

HIST 1503 World History to 1500 (ACTS=HIST1113) HIST 1513 World History since 1500 (ACTS=HIST1123) HIST 1543 Honors World History to 1500 HIST 2003 U.S. History to 1877 (ACTS=HIST2113) HIST 2013 U.S. History since 1877 (ACTS=HIST2123) HIST 2043 Honors U.S. History to 1877 HIST 1903 Survey of American History POLS 2003 American Government (ACTS=PLSC2003) ECON 2003 Principles of Economics I (ACTS=ECON2103) ECON 2103 Honors Principles of Economics I	<b>Social Sciences</b> ECON 2013 Principles of Economics II (ACTS=ECON2203) SOC 1003 Introductory Sociology (ACTS=SOC11013) PSY 2003 General Psychology (ACTS=PSYC1103) ANTH 1213 Intro. to Anthropology (ACTS=ANTH1013) ANTH 2003 Cultural Anthropology (ACTS=ANTH2013) GEOG 2013 Regional Geography of the World (ACTS=GEOG2103) AMST 2003 American Studies
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