



2+2 Degree Plan Checklist

Associate of Science in Liberal Arts and Sciences BS in Mathematics (Applied Mathematics)



Arkansas State University – Beebe Associate of Science in Liberal Arts and Sciences¹

Possible Prerequisites			Semester	Hours	Grade
UNIV	1003	Principles of Academic Success (required if registering for a remedial course)		(3)	
ENG	0013	Precollege Literacy		N/C	
ENG	0023	College Literacy (taken with ENG 1003 – Freshman English I)		N/C	
MATH	0013	Foundations of Algebra I		N/C	
MATH	0112	Review for College Algebra (taken with MATH 1023 – College Algebra)		N/C	

General Education Requirements (35 credit hours)

English/Communication (12 credit hours)			UCA ²	Semester	Hours	Grade
ENG	1003	Freshman English I	WRTG 1310		3	
ENG	1013	Freshman English II	WRTG 1320		3	
SPCH	1203	Oral Communications	COMM 1300		3	
ENG	2003	World Literature I or	ENGL 2305		3	
ENG	2013	World Literature II	ENGL 2306			

Mathematics (3 credit hours)			UCA	Semester	Hours	Grade
MATH	1023	College Algebra	MATH 1390		3	

Lab Sciences (8 credit hours)			UCA	Semester	Hours	Grade
BIOL	1004	Biology for General Education	BIOL 1400		4	
PHSC	1204	Physical Science	PHYS 1400		4	

Fine Arts (3 credit hours)			UCA	Semester	Hours	Grade
ART	2503	Fine Arts – Visual or	ART 2300 MUS 2300 THEA 2300		3	
MUS	2503	Fine Arts – Musical or				
THEA	2503	Fine Arts – Theatre or				
THEA	2513	Fine Arts – Film or				
HUM	2003	Introduction to Humanities I or				
HUM	2013	Introduction to Humanities II				

Social Sciences (6 credit hours)			UCA	Semester	Hours	Grade
HIST	2763	The United States to 1876 or	HIST 2301		3	
HIST	2773	The United States Since 1876 or	HIST 2302			
POSC	2103	Introduction to United States Government	PSCI 1330			
HIST	1013	World Civilization to 1660 or	HIST 1310		3	
HIST	1023	World Civilization since 1660	HIST 1320			

Social or Behavioral Science Elective (3 credit hours)			UCA	Semester	Hours	Grade
GEOG	2613	Introduction to Geography or	GEOG 1305		3	
GEOG	2603	World Regional Geography or	GEOG 1300			
SOC	2213	Principles of Sociology or	SOC 1300			
PSY	2013	Introduction to Psychology	PSYC 1300			

Mathematics Foundation Courses & Ancillary BS Requirement (25 credit hours)

			UCA	Semester	Hours	Grade
ECON	2313	Principles of Macroeconomics ³	ECON 2320		3	
ECON	2323	Principles of Microeconomics	ECON 2321		3	
MATH	1033	Plane Trigonometry	MATH 1392		3	
MATH	2205	Calculus I	MATH 1496		5	
MATH	2215	Calculus II	MATH 1497		5	
		General Elective			3	
		General Elective			3	

Total Hours: 60⁴



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Associate of Science in Liberal Arts and Sciences
BS in Mathematics (Applied Mathematics)



University of Central Arkansas
Bachelor of Science in Mathematics (Applied Mathematics)
UCA Courses (60 credit hours)⁵

			Semester	Hours	Grade
MATH	2335	Transition to Advanced Mathematics		3	
MATH	2441	Mathematical Computation		4	
MATH	2471	Calculus III		4	
MATH	3320	Linear Algebra		3	
MATH	3331	Ordinary Differential Equations		3	
MATH	4306	Modeling and Simulation		3	
		Choose one:			
MATH	4315	Introduction to Partial Differential Equations		3	
MATH	4340	Numerical Methods			
MATH	4373	Regression Analysis			
MATH	4371	Introduction to Probability		3	
MATH	4372	Introduction to Statistical Inference		3	
		Math Major Elective (4000 Level – from Approved List – See your Advisor)		3	
		Math Major Elective (4000 Level – from Approved List – See your Advisor)		3	
		Upper Division Minor Field Course		3	
		Upper Division Minor Field Course		3	
		Upper Division Minor Field Course		3	
		Upper Division Minor Field Course		3	
		Upper Division Minor Field Course		3	
		Upper Division Minor Field Course		3	
		Upper Division Minor Field Course		3	
		Minor Field Course		3	
		Minor Field Course		3	
		General Elective		1	

Total Hours: 120⁶

¹ See your ASU-Beebe advisor for degree and graduation information.

² UCA transfer course designations are either guaranteed by ACTS (acts.adhe.edu) or have been approved as a substitution by UCA. Unless otherwise noted, courses for which no UCA equivalent course is listed would transfer in as elective credit.

³ PHYS 2074 (UCA: PHYS 1441) and PHYS 2084 (UCA: PHYS 1442) or PHYS 2054 (UCA: PHYS 1410) and PHYS 2064 (UCA: PHYS 1420) or CHEM 1014 (UCA: CHEM 1450) and CHEM 1024 (UCA: CHEM 1451) can also be used to fulfill this ancillary BS requirement (general elective credits may need to be adjusted based upon the courses chosen to fulfill this requirement). Please see your advisor if you have questions.

⁴ Students completing the AS in Liberal Arts and Sciences degree requirements, as shown above, with a minimum 2.0 cumulative GPA, will have satisfied the UCA Lower-Division Core requirements and will be admitted to the BS in Mathematics (Applied Mathematics) degree program as a junior.

⁵ For more specific information about degree requirements within the junior and senior years at UCA, please review the UCA Undergraduate Bulletin (<http://uca.edu/ubulletin>) and consult your UCA academic advisor.

⁶ This degree program requires a total of 120 semester credit hours, including at least 40 upper-division credit hours completed at UCA.