2+2 Degree Plan Checklist
Associate of Science in Liberal Arts and Sciences
BS in Mathematics (Applied Mathematics)

Northwest Arkansas Community College
Associate of Science in Liberal Arts and Sciences[1]

Possible Prerequisites			Semester	Hours	Grade
ENGL	0063	Intermediate Writing		N/C	
MATH	0053	Beginning Algebra		N/C	
MATH	0103	Intermediate Algebra		N/C	
READ	0033	College Reading		N/C	

General Education Requirements (35 credit hours)

English/Communication (9 credit hours)			UCA[2]	Semester	Hours	Grade
ENGL	1013	Composition I	WRTG 1310		3	
ENGL	1023	Composition II	WRTG 1320		3	
COMM	1303	Public Speaking	COMM 1300		3	

Mathematics (3 credit hours)			UCA	Semester	Hours	Grade
MATH	1204	College Algebra	MATH 1390		3	

Lab Sciences (8 credit hours)			UCA	Semester	Hours	Grade
BIOL	1544	Principles of Biology I	BIOL 1440		4	
PHSC	2004	Introduction to Physical Science	PHYS 1400		4	

Fine Arts/Humanities (6 credit hours)			UCA	Semester	Hours	Grade
ARHS	1003	Art Appreciation or	ART 2300			
DRAM	1003	Introduction to Theatre or	THEA 2300		3	
MUSI	1003	Music Appreciation	MUS 2300			
ENGL	2213	Survey of World Literature to 1650 or	ENGL 2305		3	
ENGL	2223	Survey of World Literature from 1650	ENGL 2306			

U.S. History/Government (3 credit hours)			UCA	Semester	Hours	Grade
HIST	2003	History of American People to 1877 or	HIST 2301			
HIST	2013	History of American People 1877 to Present or	HIST 2302		3	
PLSC	2003	American National Government	PSCI 1330			

Social Sciences (6 credit hours)			UCA	Semester	Hours	Grade
HIST	1033	World Civilizations to 1500 or	HIST 1310		3	
HIST	1043	World Civilizations from 1500	HIST 1320			
GEOG	1123	Human Geography or	GEOG 1320			
PSYC	2003	General Psychology or	PSYC 1300		3	
SOCI	2013	General Sociology	SOC 1300			

Mathematics Foundation & Ancillary BS Requirement (25 credit hours)[3]

			UCA	Semester	Hours	Grade
ECON	2013	Principles of Macroeconomics[3]	ECON 2320		3	
ECON	2023	Principles of Microeconomics[3]	ECON 2321		3	
MATH	1213	Plane Trigonometry	MATH 1392		3	
MATH	2554	Calculus I	MATH 1496		4	
MATH	2564	Calculus II	MATH 1497		4	
		General Elective			3	
		General Elective			3	
		General Elective			2	

Total Hours: 60[4]

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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	
MATH MATH MATH	4315 4340 4373	**Choose one:** Introduction to Partial Differential Equations Numerical Methods Regression Analysis		3	
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	
		Minor Field Course		3	
		Minor Field Course		3	
		General Elective		1	

Total Hours: 120[6]

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[1] See your NWACC 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] The following course combinations will also satisfy the ancillary BS requirement (general elective credit hours may need to be adjusted based upon the courses chosen - please see your advisor if you have questions about this requirement):

- 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)

[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.