

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



Northwest Arkansas Community College¹ Associate of Science in Liberal Arts and Sciences²

Possible Prerequisites

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 (36 credit hours)

English Cor	nposition (6	credit hours)	UCA ³	Semester	Hours	Grade
ENGL	1013	Composition I	WRTG 1310		3	
ENGL	1023	Composition II	WRTG 1320		3	
Mathematics (4 credit hours)			UCA	Semester	Hours	Grade
MATH	1204	College Algebra	MATH 1390		4	
Lab Sciences (8 credit hours)		UCA	Semester	Hours	Grade	
BIOL	1544	Principles of Biology I	BIOL 1440		4	
		(or other ASLAS Life Science with Lab)			4	
PHSC	2004	Introduction to Physical Science	PHYS 1400		4	
		(or other ASLAS Physical Science with Lab)			4	
Fine Arts/H	lumanities (6 credit hours)	UCA	Semester	Hours	Grade
ARHS	1003	Art Appreciation or	ART 2300			
COMM	1303	Public Speaking or	COMM 1300		3	
MUSI	1003	Music Appreciation	MUS 2300		5	
		(or other ASLAS Fine Arts)				
ENG	2213	Survey of World Literature to 1650 or	ENGL 2305			
ENG	2223	Survey of World Literature from 1650	ENGL 2306		3	
		(or other ASLAS Humanities)				
U.S. History	y/Governme	ent (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 Scier	nces (9 credi	it hours)	UCA	Semester	Hours	Grade
ANTH	1023	Introduction to Cultural Anthropology or	ANTH 1302			
GEOG	1123	Human Geography or	GEOG 1320			
HIST	1033	World Civilizations to 1500 or	HIST 1310			
HIST	1043	World Civilizations from 1500 or	HIST 1320			
PHIL	2003	Introduction to Philosophy or	PHIL 1301		9	
PHIL	2033	World Religions or	RELG 1320			
PSYC	2003	General Psychology or	PSYC 1300			
SOCI	2013	General Sociology	SOC 1300			
		(or other ASLAS Social Science)				

Mathematics Foundation & Ancillary BS Requirement (24 credit hours)⁴

			UCA	Semester	Hours	Grade
ECON	2013	Principles of Macroeconomics ⁴	ECON 2320		3	
ECON	2023	Principles of Microeconomics ⁴	ECON 2321		3	
MATH	1213	Plane Trigonometry	MATH 1392		3	
MATH	2554	Calculus I	MATH 1496		4	
MATH	2564	Calculus II	MATH 1497		4	
		ASLAS Approved Elective			3	
		ASLAS Approved Elective			3	
		ASLAS Approved Elective			1	

Total Hours: 60⁵



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University of Central Arkansas

Bachelor of Science in Mathematics (Applied Mathematics)

UCA Courses (60 credit hours)⁶

MATH	2335	Transition to Advanced Mathematics		
		Transition to Advanced Mathematics	3	1
MATH	2441	Mathematical Computation	4	
MATH	2471	Calculus III	4	
MATH	3320	Linear Algebra (UD Core: I)	3	
MATH	3311	Statistical Methods	3	
MATH	3331	Ordinary Differential Equations (UD Core: C)	3	
MATH	4306	Modeling and Simulation (UD Core: Z)	3	
		Choose one:		
MATH	4315	Introduction to Partial Differential Equations	3	
MATH	4340	Numerical Methods	5	
MATH	4373	Regression Analysis		
MATH	4371	Introduction to Probability (UD Core: R)	3	
		Math Major Elective (4000 Level – from Approved List – See your Advisor)	3	L .
		Math Major Elective (4000 Level – from Approved List – See your Advisor)	3	
		Upper Division Minor Field Course (UD Core: D)	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: <u>120</u>⁷

¹ Please see your NWACC advisor for degree and graduation information.

² Agreement requirements are guaranteed in accordance with the academic year of initial enrollment at NWACC, not to precede the academic year during which the agreement first took effect. A period of non-enrollment of 12 months or more requires that the student adhere to the agreement revision corresponding with the academic year of re-enrollment.

³ UCA course is either guaranteed by ACTS (acts.adhe.edu) or by UCA Department Chair approval (if blank, elective credit will be awarded). ⁴ 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)

⁵ 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 and be admitted to the BS in Mathematics (Applied Mathematics) degree program as a junior.
⁶ In order to receive important communications about transferring to UCA, students are encouraged to create a UCA student account at <u>gopurple.uca.edu</u>. For more information about the 2+2 program, students may also send email inquiries to <u>ucatransfer@uca.edu</u>.
⁷ This agreement requires <u>120</u> credit hours: maximum 60 at NWACC and remaining 60 at UCA (40 of which must be upper-division).