

BACHELOR of ARTS in MATHEMATICS (#728) Teacher Certification

Department of Mathematics

Ogden College of Science and Engineering

Western Kentucky University

The following four-year plan is an example of how to map your program in consultation with your faculty advisor. Every student will finish with a unique plan of his/her own depending on the electives selected.

Success Markers

SAMPLE - 4 year plan

FIRST YEAR	Fall Semester		Spring Semester	
	MATH 136 – Calculus I (F-Quantitative Reasoning)	4	MATH 137* - Calculus II	4
	SMED 101 – Introduction to Inquiry- Based Lesson Design	1	SMED 102 - Introduction to Inquiry-Based Lesson Design	2
	CS 170 – Problem Solving & Programming OR CS 180 – Computer Science I	3-4	World Language, if needed, OR General Elective	3
	ENGL 100 Introduction to College Writing (F-W1)	3	COMM 145 Fund of Public Speaking and Communication (F-OC)	3
	Natural & Physical Science & Lab (E-NS, SB)	3	HIST 101 World History I OR HIST 102 World History II (F-SB)	3
	TOTAL CREDIT HOURS	15	TOTAL CREDIT HOURS	15

SECOND YEAR	Fall Semester		Spring Semester	
	MATH 237 – Multivariable Calculus	4	MATH 310 – Discrete Math	3
	MATH 307* - Linear Algebra	3	SMED 320 – Classroom Interactions	3
	SMED 310 – Knowing and Learning in Mathematics and Science	3	STAT 301 – Introductory Probability and Applied Statistics	3
	ENG 200 Intro to Literature (F-AH)	3	Natural & Physical Science (E-NS)	3
	Social & Behavioral Studies (E-SB)	3	Arts & Humanities (E-AH)	3
	TOTAL CREDIT HOURS	16	TOTAL CREDIT HOURS	15

- World Language Proficiency: All students entering in fall 2014 or later must demonstrate proficiency in a world language at the Novice High level before completing 60 credit hours. Novice high is the ability to communicate in writing and speaking on familiar topics in simple sentences. To meet this requirement, students may take college language courses or take a proficiency test. For more information go to: World Language Proficiency.
- Colonnade Program: All students entering in fall 2014 or later must complete 39 hours in 13 specific Colonnade areas. Colonnade areas are listed in parentheses marked in blue after the corresponding classes. Some areas may have specific course requirements while others can be chosen from selected lists of options. For more details and to see lists of options, go to Colonnade Requirements.

THIRD YEAR	Fall Semester		Spring Semester	
	MATH 304 – Functions, Applications, and Explorations Colonnade (F-Writing in the Disciplines)	3	MATH 317 – Introduction to Algebraic Systems	3
	MATH 323 – Geometry I	3	MATH Elective (400 level**)	3
	SMED 340 – Perspectives on Mathematics and Science	3	SMED 360 – Research Methods for Math and Science Teachers	3
	Connections: Social & Cultural (K-SC)	3	ENG 300 Writing in the Disciplines (F-W2)	3
	Connections: Local to Global (K-LG)	3	Connections: Systems (K-SY)	3
	TOTAL CREDIT HOURS	15	TOTAL CREDIT HOURS	15

FOURTH YEAR	Fall Semester		Spring Semester	
	MATH 498 – Senior Seminar	3	SMED 489 – SMED Student Teaching Seminar	3
	SMED 470 – Project-Based Instruction	3	SEC 490 – Student Teaching	10
	SPED 330 – Introduction to Exceptional Education: Diversity in Learning	3		
	General Electives	7		
	TOTAL CREDIT HOURS	13	TOTAL CREDIT HOURS	13

Total Credit Hours:120

PLEASE NOTE: Prerequisites, Course Numbers, and Course Titles are subject to change.

Consult your advisor each semester.

Course Descriptions may be viewed at http://www.wku.edu/catalog

FOR ADDITIONAL INFORMATION, PLEASE CONTACT:

Department: Mathematics **Website:** <u>www.wku.edu/math</u>

Phone: (270)745-3651 Email: math@wku.edu

Course Descriptions: http://www.wku.edu/undergraduatecatalog/

^{*} Denotes prerequisite courses before admission

^{**} Three more hours from MATH 405, 406, 409, 415, 417, 421, 423, 431, 439, 450, 470, 482.