

BACHELOR of ARTS in MATHEMATICS (#528) B2: Fundamentals of Applied Mathematics

Department of Mathematics

Ogden College of Science and Engineering

Western Kentucky University

The suggested program of study shown below should be used in consultation with your advisor(s). 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	
Visit <u>The Learning</u> <u>Center</u> for free	CS 180 – Computer Science I	4	CS 181 – Computer Science II	4
tutoring	ENG 100 – Introduction to College Writing	3	PHIL 215 – Elementary Logic	3
	General Education Course DL	4	HIST 119 – Western Civ to 1648 OR HIST 120 – Western Civ Since 1648	3
	MATH 136 – Calculus I	4	PE 101	1
			MATH 137* - Calculus II	4
	TOTAL CREDIT HOURS	15	TOTAL CREDIT HOURS	15

SECOND YEAR	Fall Semester		Spring Semester	
	General Education Course A-III	3	General Education Course C	3
	ENG 200 – Intro to Literature	3	General Education Course D	3
	General Education Course A-II	3	MATH 317 – Introduction to Algebraic System	3
	MATH 307* - Linear Algebra	3	MATH 237 – Multivariable Calculus	4
	MATH 310 – Discrete Math	3	MATH 331 – Differential Equations	3
	TOTAL CREDIT HOURS	15	TOTAL CREDIT HOURS	16

WINTER TERM	Winter Term			
Why not <u>Study</u>				
Abroad?	TOTAL CREDIT HOURS			

THIRD YEAR	Fall Semester		Spring Semester	
	ENG 300 – Writing in the Disciplines	3	General Education Course C	3
Visit <u>Career Services</u>	PE 101 – Activity Course	1	General Elective	3
	General Education Course B	3	General Elective	3
	NATH 370 – Applied Techniques in mathematics	3	MATH 337 – Elements of Real Analysis	3
	MATH 382 – Probability and Statistics	3	Math Elective (300/400 level)**	3
	MATH 405 – Numerical Analysis I	3		
	TOTAL CREDIT HOURS	16	TOTAL CREDIT HOURS	15

SUMMER TERM	Summer Term		
	It is STRONGLY recommended to purse an		
	internship in your prospective career field after		
	the third year.		

FOURTH YEAR	Fall Semester		Spring Semester	
Apply for Graduation	General Education Course E	3	General Elective	3
	General Elective	3	General Elective	3
	General Elective	2	General Elective	2
	MATH 431 – Intermediate Analysis I	3	Math Elective (300/400 level)**	3
	MATH 498 – Senior Seminar	3	Math Elective (300/400 level)**	3
Celebrate	TOTAL CREDIT HOURS	14	TOTAL CREDIT HOURS	14
Total Credit Hours: 120				

^{*} Denotes prerequisite courses before admission

PLEASE NOTE: Prerequisites, Course Numbers, and Course Titles are subject to change. Consult your advisor each semester.

For more Information:

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

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

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

^{**} Two courses from MATH 305, 406, 435, 470, 482. Three more hours from MATH 275 (up to 3 hours), STAT 301, MATH 305, 315, 323, 398 (up to 3 hours), 406, 409, 415, 417, 423, 432, 435, 450, 470, 473, 475 (up to 6 hours), 482.