

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 FIRST YEAR

SAMPLE - 4 year plan

Sciences)

14-16

TOTAL CREDIT HOURS

3

16-17

	Fall Semester		Spring Semester	
Visit <u>The Learning</u> <u>Center</u> for free	MATH 136 – Calculus I (F-Quantitative Reasoning)	4	MATH 137 - Calculus II	4
tutoring	CS 180 – Computer Science I	4	CS 181 – Computer Science II OR MATH 371 – Computational Problem Solving	3-4
	PHIL 215 – Elementary Logic (prerequisite for CS 181 if taking that course) OR EE 180 – Digital Circuits	3	ENG 100 – Introduction to College Writing (F-College Composition)	3
	Colonnade (E-Natural & Physical Science, with lab)	3-5	HIST 101 – World History I OR HIST 102 – World History II (F-World History)	3
			Colonnade (E-Social & Behavioral	3

SECOND YEAR	Fall Semester		Spring Semester	
	MATH 307 - Linear Algebra	3	MATH 237 – Multivariable Calculus	4
	MATH 310 – Discrete Math	3	MATH 317 – Introduction to Algebraic Systems	3
	COMM 145 – Fundamentals of Public Speaking and Communication (F-Human Communication)	3	MATH 331 – Differential Equations	3
	ENG 200 – Introduction to Literature (F-Literary Studies)	3	Colonnade (E-Arts & Humanities)	3
	Foreign Language	3	Colonnade (E-Natural & Physical Sciences)	3
	TOTAL CREDIT HOURS	15	TOTAL CREDIT HOURS	16

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

TOTAL CREDIT HOURS

THIRD YEAR	Fall Semester		Spring Semester	
	MATH 370 – Applied Techniques in Mathematics	3	MATH 337 – Elements of Real Analysis	3
Visit <u>Career Services</u>	MATH 382 – Probability and Statistics I	3	Math Elective (300/400 level)*	3
	MATH 405 – Numerical Analysis I	3	Colonnade (C-Local to Global)	3
	Colonnade (F-Writing in the Disciplines)	3	Colonnade (C-Systems)	3
	Colonnade (C-Social to Cultural)	3	General Elective	3
	TOTAL CREDIT HOURS	15	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	TH YEAR Fall Semester		Spring Semester	
	MATH 431 – Intermediate Analysis I	3	MATH 498 – Senior Seminar	3
<u>Apply for</u> <u>Graduation</u>	Math Elective (300/400 level)*	3	Math Elective (300/400 level)*	3
gradiation	General Electives	8	General Elective	6-9
Celebrate	TOTAL CREDIT HOURS	14	TOTAL CREDIT HOURS	12-15

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 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, 371 (if not taken in place of CS 181), 398 (up to 3 hours), 406, 409, 415, 417, 423, 435, 439, 450, 470, 473, 475 (up to 6 hours), 482.