

## **BACHELOR of SCIENCE in MATHEMATICS (#528)**

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. Admission to the major is required to register for all 300 and 400 nursing classes. All upper-division nursing courses must be taken in sequence to meet NURS course prerequisite requirements.

## **SAMPLE – Finish in Four Plan**

FIRST YEAR			
Fall Semester		Spring Semester	
MATH 136 – Calculus I (F-Quantitative Reasoning)	4	MATH 137 - Calculus II	4
CS 180 – Computer Science I	4	CS 181 – Computer Science II <b>OR</b> MATH 371 – Computational Problem Solving	3-4
PHIL 215 – Elementary Logic (prerequisite for CS 181 if taking that course) <b>OR</b> 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 <b>OR</b> HIST 102 – World History II (F-World History)	3
		Colonnade (E-Social & Behavioral Science)	3
TOTAL CREDIT HOURS	14-	TOTAL CREDIT HOURS	16-
TOTAL CREDIT HOURS	16	TOTAL CREDIT HOURS	17

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 Elective (300/400 level)*	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	

THIRD YEAR			
Fall Semester		Spring Semester	
MATH 337 – Elements of Real Analysis	3	MATH 417 – Algebraic Systems	3
MATH 439 – Topology I	3	MATH 450 – Complex Variables	3
Math Elective (300/400 level)*	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

FOURTH YEAR				
Fall Semester		Spring Semester		
MATH 431 – Intermediate Analysis	3	MATH 498 – Senior Seminar	3	
Math Elective (300/400 level)*	3	Math Elective (300/400 level)*	3	
General Electives	8	General Electives	6-9	
TOTAL CREDIT HOURS	14	TOTAL CREDIT HOURS	12- 15	
TOTAL CREDIT HOURS		TOTAL CREDIT HOURS		

Total Credit Hours: 120

For more details and courses offered in the Colonnade General Education program visit the website.

**World Language Requirement**: Language Proficiency of novice-high before completing 60 credit hours is required (or completion of 2nd level of a language). Two credits (or equivalent) of a single world language in High School satisfies this WKU requirement.

## 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/

<sup>\*</sup> Two courses from MATH 315, 323, 415, 423, 473. Six more hours from MATH 275 (up to 3 hours), STAT 301, MATH 305, 315, 323, 331, 370, 371 (if not taken instead of CS 181), 382, 398 (up to 3 hours), 405, 406, 409, 415, 423, 435, 470, 473, 475 (up to 6 hours), 482.