

SAMPLE 4-YEAR PLAN: PURE MATHEMATICS B.S.

Northern Kentucky University

This is **one way** a student can complete this program in four years if the student requires no remedial courses.

MAJOR: Mathematics

TRACK: Pure Mathematics

FIRST YEAR	Fall Semester		Spring Semester	
	MAT 129 Calculus I ¹	4	MAT 229 Calculus II	5
MAT 194 Mathematical Sciences Seminar	1	STA 250 Probability and Statistics I	3	
Gen Ed: Communication; Written I	3	Gen Ed: Communication; Oral	3	
General education	3	Elective/minor	3	
Elective/minor	3			
TOTAL	14	TOTAL	14	
SECOND YEAR	Fall Semester		Spring Semester	
	CSC 270 Mathematics Software Programming	3	MAT 234 Linear Algebra	3
MAT 329 Calculus III	4	MAT 302 Introduction to Higher Mathematics	3	
Gen Ed: Communication; Written II	3	Gen Ed: Scientific and Quantitative Inquiry; Natural Sciences with lab	4	
Gen Ed: Scientific and Quantitative Inquiry; Natural Sciences without lab	3	General education	3	
Elective/minor	3	Elective/minor	3	
TOTAL	16	TOTAL	16	
THIRD YEAR	Fall Semester		Spring Semester	
	MAT 410 Abstract Algebra I or MAT 420 Real Variables I ²	3	MAT 415 Abstract Algebra II or MAT 430 Complex Variables ³	3
MAT/STA major elective	3	MAT/STA major elective	3	
General education	3	General education	3	
Elective / minor	3	Elective / minor	3	
Elective / minor 300 level or above	3	Elective / minor 300 level or above	3	
TOTAL	15	TOTAL	15	
FOURTH YEAR	Fall Semester		Spring Semester	
	¹ MAT 410 Abstract Algebra I or MAT 420 Real Variables I ²	3	Elective / minor	3
General education	3	MAT 430 Complex Variables or MAT/STA major elective	3	
Elective / minor	3	Elective / minor	3	
Elective / minor 300 level or above	3	Elective / minor	3	
Elective / minor 300 level or above	3	Elective / minor 300 level or above	3	
		MAT 489 Comprehensive Examination	0	
TOTAL	15	TOTAL	15	
GRAND TOTAL OF CREDITS			120	

Notes: This plan is ONE way in which you can complete your degree program in four years; it is not the only way. It assumes that you have a mathematical background sufficient to begin with calculus as evidenced by a mathematics ACT score of 25 or greater, or a mathematics SAT score of 570 or greater. It also assumes that you are not a transfer student, and you are beginning in the fall.

¹MAT 129 satisfies the mathematics general education requirement.

²The two-semester sequences MAT 410 - MAT 415 and MAT 420 - MAT 421 are offered on alternate years.

³Beginning Spring 2018, MAT 430 will be offered in spring semesters of even-numbered years.