

SAMPLE 4-YEAR PLAN: MATHEMATICS - APPLIED 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: Applied 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	
INF 110 Business Programming or INF 120 Elementary Programming	3	CSC 260 Object-Oriented Programming I	3	
General Education	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 325 Differential Equations	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	3	General education	3	
Elective/minor	3	Elective/minor	3	
TOTAL	16	TOTAL	16	
THIRD YEAR	Fall Semester		Spring Semester	
	MAT 330 Classical Applied Analysis or MAT/STA major elective	3	MAT 360 Numerical Analysis ² 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	
	MAT 375 Applied Mathematical Models ² or MAT/STA major elective	3	MAT 360 Numerical Analysis ² or MAT 430 Complex Variables ³	3
Elective/minor 300 level or above	3	Elective/Minor	3	
General education	3	Elective/ minor	3	
Elective/minor 300 level or higher	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.

² MAT 360 and MAT 375 are offered every other year.

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