

**Northern Kentucky University**

MAJOR: **Mathematics**

TRACK: **Pure Mathematics**

FIRST YEAR	Fall Semester		Spring Semester	
	MAT 129 Calculus I <sup>1</sup>	4	MAT 229 Calculus II	5
MAT 129 Mathematical Sciences Seminar	1	STA 250 Probability & Statistics I	3	
Gen Ed: Communication (Written I)	3	Gen Ed: Communication (Oral)	3	
Gen Ed: Culture & Creativity	3	Elective/minor	3	
Gen Ed: Scientific & Quantitative Inquiry (Natural Sciences without lab)	3			
<b>TOTAL</b>	<b>14</b>	<b>TOTAL</b>	<b>14</b>	
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 & Quantitative Inquiry (Natural Sciences with lab)	4	
Elective/minor	3	Gen Ed: Cultural Pluralism	3	
Elective/minor	3	Elective/minor	3	
<b>TOTAL</b>	<b>16</b>	<b>TOTAL</b>	<b>16</b>	
THIRD YEAR	Fall Semester		Spring Semester	
	MAT 410 Abstract Algebra I <b>or</b> MAT 420 Real Variables I <sup>2</sup>	3	MAT 415 Abstract Algebra II <b>or</b> MAT 430 Complex Variables <sup>3</sup>	3
MAT/STA major elective (300-level or higher)	3	MAT/STA major elective (300-level or higher)	3	
Gen Ed: Individual & Society	3	Gen Ed: Individual & Society	3	
Gen Ed: Culture & Creativity	3	Elective/minor (300-level or higher)	3	
Elective/minor	3	Elective/minor (300-level or higher)	3	
<b>TOTAL</b>	<b>15</b>	<b>TOTAL</b>	<b>15</b>	
FOURTH YEAR	Fall Semester		Spring Semester	
	MAT 410 Abstract Algebra I <b>or</b> MAT 420 Real Variables I <sup>2</sup>	3	MAT 430 Complex Variables <sup>3</sup> <b>or</b> MAT/STA major elective (300-level or higher)	3
Gen Ed: Global Viewpoints	3	Elective/minor	3	
Elective/minor	3	Elective/minor (300-level or higher)	3	
Elective/minor	3	Elective/minor	3	

	(300-level or higher)		(300-level or higher)	
	Elective/minor (300-level or higher)	3	Elective/minor (300-level or higher)	3
			MAT 489 Comprehensive Examination	0
	<b>TOTAL</b>	<b>15</b>	<b>TOTAL</b>	<b>15</b>
<b>GRAND TOTAL OF CREDITS</b>				<b>120</b>

Note: This plan is ONE way in which you can complete your degree program in 4 years; it is not the only way. It assumes that you have a mathematical background sufficient to begin with calculus as evidenced by a math ACT score of at least 27 or a math SAT score of at least 650. It also assumes that you are not a transfer student, and you are beginning in the fall.

<sup>1</sup>MAT 129 satisfies the Scientific & Quantitative Literacy Mathematics & Statistics general education requirement.

<sup>2</sup>MAT 410 is offered fall-only in even years. MAT 420 is offered fall-only odd years.

<sup>3</sup>MAT 415 is offered spring-only odd years. MAT 430 is offered spring-only even years.