TRANSFER PATHWAY GUIDE
2025-2026

Associate in Science to
Bachelor of Science in Mathematics

Overview
Completion of the following curriculum will satisfy the requirements for the Associate in Science (AS) degree at Gateway Community and Technical College (GCTC) and leads to the Bachelor of Science (BS) in Mathematics degree at Northern Kentucky University (NKU).

Applying to the Gateway2NKU Program
Students can apply to participate in the pathway program by completing the online application on the NKU transfer webpage. Students must be enrolled in at least six credit hours at Gateway, enrolled in an associate degree program, plan to transfer to NKU, and maintain a minimum 2.0 cumulative GPA at Gateway.

Degree Requirements for GCTC
1. Completion of minimum 60 credit hours
2. Minimum cumulative GPA 2.0
3. Minimum of 15 credit hours earned at the institution awarding the degree,
4. Demonstration of digital literacy
5. College success requirement

Admission Requirements to NKU
Students completing an associate degree with a cumulative GPA of 2.0 or higher will be accepted into NKU.

Degree Requirements for NKU
To earn a bachelor's degree at NKU, students must:
1. Complete a minimum of 120 credit hours
2. Complete at least 25% of the credit hours required at NKU
3. Complete the last 30 credit hours at NKU
4. Complete at least 45 credit hours numbered 300 or above
5. Minimum 2.0 cumulative GPA across all major coursework
6. Meet all requirements for the major

7. Completion of a minor, focus, or second major (if required by major)
8.

Students must have an overall GPA of 2.0 and meet all prerequisites for courses and requirements for the major.

In addition, the mathematics major at NKU requires that:

- Students must make a C- or better in all courses. At least 20 percent of the total required hours must be taken at NKU.
- At least 9 credit hours toward the major must be completed at NKU
- A student majoring in mathematics and seeking a focus in statistics must complete four additional 300 or 400-level STA courses not used to satisfy the mathematics major.
- Any substitutions in these programs must be made in consultation with the chair of the department.

General Transfer Information
Students must complete the online application to NKU. There is no application fee for students who are transferring from GCTC.

KCTCS Scholars Award: Students who are KY residents transferring directly from a KCTCS institution with at least 36 hours from that institution and minimum GPA of 3.0, were never enrolled as a degree-seeking student at NKU and will be enrolled in at least 12 credit hours both fall and spring semester are eligible for a limited number of annual scholarships (fall and spring only). Students must gain admission to NKU by June 15 for fall and November 1 for spring to be eligible for a possible scholarship. Online accelerated programs are not eligible for the KCTCS Scholars Award.

Tuition and scholarship information specific to transfer students can be viewed on the NKU Adult & Transfer Center website.

GCTC AS TO NKU BS IN MATHEMATICS CHECKLIST

Gateway Community and Technical College

Category 1: GCTC General Education Core Requirements

GCTC Course	Course or Category	Credits	NKU Course	Completed
ENG 101	Writing I (WC)	3	ENG 101	
ENG 102	Writing II (WC)	3	ENG 102	
TBS XXX	Oral Communication (OC)	3	TBD XXX	
TBS XXX	Arts & Humanities (AH) – Heritage	3	TBD XXX	
TBS XXX	Arts & Humanities (AH) – Humanities	3	TBD XXX	
TBS XXX	Social & Behavioral Science (SB)	3	TBD XXX	
TBS XXX	Social & Behavioral Science (SB)	3	TBD XXX	
INF 120	Elementary Programming (NS)	3	INF 120	
TBS XXX	Natural Science Course with Lab (SL)	4	TBD XXX	
MAT 175	Calculus I (QR)	5	MAT 129	
MAT 185	Calculus II (QR)	5	MAT 229	
	Subtotal General Education Core Courses	**38**		

TBS XXX means to be selected by GCTC student.
TBD XXX means to be determined by NKU based on course selected.

For Social and Behavioral Sciences courses, two disciplines must be represented and different from those in the Arts and Humanities category.

Category 2: GCTC AS Requirements

GCTC Course	Course or Category	Credits	NKU Course	Completed
Taken at NKU	Probability and Statistics I	3	STA 250	
	Subtotal AS Requirement Courses	**3**		

Category 3: GCTC Electives

GCTC Course	Course or Category	Credits	NKU Course	Completed
FYE 105 or FYE 110	Achieving Academic Success or First Year Experience and Applications	3	UNV 100T	
CIT 105*	Introduction to Computers	3	BIS 101	
MAT 275	Calculus III	4	TBD XXX	
TBS XXX or Taken at NKU	Elective or NKU major course	3	TBD XXX	
CIT 149**	Java I	3	CSC 260	
	Subtotal Elective Courses	**15**		
	Total Associate Degree Hours	**60**		

*If completing digital literacy using other means (like FYE 110), additional credit hours will be required in order to fulfill elective requirements.

CIT 120 pre-requisite will be waived for students pursuing this pathway

Northern Kentucky University

Category 4: NKU Major Requirements for the BS in Mathematics

NKU Course	Course	Credits	GCTC Course	Taken at GCTC
MAT 129	Calculus I - QR	4	MAT 175	x
MAT 229	Calculus II	5	MAT 185	x
MAT 329	Calculus III	4	MAT 275	x
MAT 234	Linear Algebra	3		
MAT 302	Intro to Higher Mathematics	3		
MAT 393 or EDU 311	Career Explorations in Mathematics or Admission Field Experience Secondary	1-2		
MAT 489	Comprehensive Examination	0		
STA 250	Probability and Statistics	3	Taken at NKU	x
CSC 260 or CSC 270	Object Orient Programming or Mathematics Software Programming	3	CIT 149	X
	Select 1 track from the following tracks: General Mathematics Track Secondary Education Track (requirements in category 6-7)	18		
	Subtotal Major Credit Hours at NKU	**19-20**		
	Subtotal Credit Hours at GCTC	**60**		
	Total Major Credit Hours	**44-45**		

Category 5: Additional Requirements at NKU

NKU Course	Course	Credits	KCTCS Course	Taken at KCTCS
	Subtotal Minor/Focus and Elective Hours	**40-41**		
	Total Baccalaureate Degree Credit Hours	**120**		

Category 6: NKU General Mathematics Track Requirements

NKU Course	Course	Credits	GCTC Course	Taken at GCTC
MAT 310 or MAT 410 or MAT 415	Elementary Theory of Numbers Group Theory Rings and Fields	3		
MAT 360 or MAT 420 or	Numerical Analysis Real Variables I	3		

NKU Course	Course	Credits	GCTC Course	Taken at GCTC
MAT 430	Complex Variables			
TBS XXX	Select 12 hours of additional MAT/STA electives at the 300 level or above. At least 6 of these hours must be MAT courses.	12		

Category 7: NKU Secondary Education Track Requirements

NKU Course	Course	Credits	GCTC Course	Taken at GCTC
STA 341	Statistics II	3		
MAT 345	Introduction to Higher Geometry	3		
MAT 310 or MAT 410 or MAT 415	Elementary Theory of Numbers Group Theory Rings and Fields	3		
MAT 360 or MAT 420 or MAT 430	Numerical Analysis Real Variables I Complex Variables	3		
TBS XXX	Select 3 hours of additional MAT/STA electives at the 300 level or above.	3		

Updated January 2026