



TWO DEGREES, ONE PATH

TRANSFER PATHWAY GUIDE 2024-2025

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) cultural competence course, 5) demonstration of digital literacy, 6) 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 complete a minimum of 120 credit hours with at least 45 credit hours numbered 300 and above. In addition, at least 25% of the credit hours required for the degree and the last 30 credit hours must be completed at NKU. 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 double major in mathematics and statistics consists of satisfying the degree requirements of both majors with a minimum of 58 credit hours of courses applicable to either major.
- 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 \$2,500 annual scholarships (\$1,250 per fall and spring). 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.

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
MAT 275	Calculus III	4	MAT 329	
MAT 261	Introduction to Number Theory	3	MAT 310	
	Subtotal AS Requirement Courses	7		

Category 3: GCTC Electives

GCTC Course	Course or Category	Credits	NKU Course	Completed
FYE 105	Achieving Academic Success	3	UNV 100T	
CIT 105	Introduction to Computers	3	BIS 101	
TBS XXX or Taken at NKU	Elective or NKU major course	3	TBD XXX	
CIT 120	Computational Thinking	3	INF 100T	
CIT 149	Java I	3	CSC 260	
	Subtotal Elective Courses	15		
	Total Associate Degree Hours	60		

Degree Requirement: One course must be selected from the KCTCS identified Cultural Competence course list in the KCTCS catalog.

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	Career Explorations in Mathematics	1		
MAT 489	Comprehensive Examination	0		
STA 250	Probability and Statistics	3		
CSC 260 or CSC 270	Object Orient Programming or Mathematics Software Programming	3	CIT 149	X
Choose one: MAT 310 MAT 410 MAT 415	Choose one course from the following: Elementary Theory of Numbers Group Theory Rings and Fields	3	MAT 261	X
Choose one: MAT 360 MAT 420 MAT 430	Choose one course from the following: Numerical Analysis Real Variables I Complex Variables	3		
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		
	Subtotal Major Credit Hours at NKU	25		
	Subtotal Major Credit Hours at GCTC	19		
	Total Major Credit Hours	44		

Category 5: Additional Requirements at NKU

NKU Course	Course	Credits	KCTCS Course	Taken at KCTCS
	Subtotal Minor/Focus Hours	12-24		
	Subtotal Elective (300/400 level) Hours	11-23		
	Total Baccalaureate Degree Credit Hours	120		

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