

# TRANSFER PATHWAY GUIDE

# 2019-2020

Associate in Science to

Bachelor of Science in Mathematics

## Overview

Completion of the following curriculum will satisfy the requirements for the Associate in Science degree at Gateway Community and Technical College and leads to the Bachelor of Science in Mathematics degree at Northern Kentucky University.

## 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 studies 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 (33 hours)

| **GCTC Course** | **Course or Category** | **Credits** | **NKUCourse** | **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 |  |
| Gateway2NKU | MAT 229 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.

One of these courses must be selected from the KCTCS identified Cultural Studies course list, indicate by placing (CS) next to the course name in Category 1 or 2 table.

#### Category 2: GCTCS AS Requirements (6 hours)

| **GCTC Course** | **Course or Category** | **Credits** | **NKUCourse** | **Completed** |
| --- | --- | --- | --- | --- |
| Gateway2NKU | MAT 329 Calculus III | 4 | MAT 329 |  |
| MAT 261 | Introduction to Number Theory | 3 | MAT 310 |  |
|  | **Subtotal AS Requirement Courses** | **7** |  |  |

#### Category 3: GCTCS Electives (21 hours)

| **GCTC Course** | **Course or Category** | **Credits** | **NKUCourse** | **Completed** |
| --- | --- | --- | --- | --- |
| FYE 105 | Achieving Academic Success | 3 | UNV 100T |  |
| CIT 105 | Introduction to Computers | 3 | BIS 101 |  |
| Gateway2NKU | Mathematics Software Programming | 3 | CSC 270 |  |
| Gateway2NKU | Linear Algebra (or other major core course) | 3 | MAT 234 |  |
| TBS XXX | Elective | 3 | TBD XXX |  |
|  | **Subtotal Elective Courses** | **15** |  |  |
|  | **TOTAL Associate Degree Hours** | **60** |  |  |

### Northern Kentucky University

#### Category 4: Major Requirements for the BS in Mathematics (44 hours)

| **NKU Course** | **Course** | **Credits** | **GCTC Course** | **Taken at GCTC** |
| --- | --- | --- | --- | --- |
| MAT 129 | Calculus I - QR | 4 | MAT 175 | X |
| MAT 229 | Calculus II | 5 | Gateway2NKU | X |
| MAT 329 | Calculus III | 4 | Gateway2NKU | X |
| MAT 194 | Mathematical Sciences Seminar | 1 |  |  |
| MAT 234 | Linear Algebra | 3 | Gateway2NKU | X |
| MAT 302 | Intro to Higher Mathematics | 3 |  |  |
| MAT 489 | Comprehensive Examination  | 0 |  |  |
| STA 250 | Probability and Statistics | 3 |  |  |
| CSC 260 ORCSC 270 | Object Orient Programming ORMathematics Software Programming | 3 | Gateway2NKU | X |
| Choose one:MAT 310MAT 310MAT 415 | Elementary Theory of NumbersGroup TheoryRings and Fields | 3 | MAT 261 | X |
| Choose one:MAT 360MAT 420MAT 430 | Numerical AnalysisReal Variables IComplex 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**  | **22** |  |  |
|  | **Subtotal Major Credit Hours at GCTC** | **22** |  |  |
|  | **Total Major Credit Hours** | **44** |  |  |

**Category 5: Additional Requirements at NKU**

| **NKU Course** | **Course** | **Credits** | **KCTCS Course** | **Taken at KCTCS** |
| --- | --- | --- | --- | --- |
|  | **Subtotal Minor/Focus Hours** | **12-21** |  |  |
|  | **Subtotal Elective (300/400 level) Hours** | **20-29** |  |  |
|  | **Total Baccalaureate Degree Credit Hours** | **120** |  |  |

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