



TWO DEGREES, ONE PATH

TRANSFER PATHWAY GUIDE 2025-2026

Associate in Science to
Bachelor of Science in Applied Software Engineering

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 Applied Software Engineering 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 CTC, enrolled in an associate degree program, plan to transfer to NKU, and maintain a minimum 2.0 cumulative GPA at Gateway CTC.

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 minor, focus, or second major (if required by major)

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.

Credits for Prior Learning: Credits for Certifications:

Students with a current certification at the time of registering for classes will receive credit for equivalent NKU courses based on the following course mappings.

Amazon Web Services

NKU students who have completed and passed the AWS Certified Cloud Practitioner certification will receive credit for an equivalent NKU course. Students must submit proof of successful completion of the program. The chart below shows the semester hours and the equivalent NKU course.

EXAMINATION	EQUIVALENT NKU COURSE	TOTAL SEMESTER HOURS
AWS Certified Cloud Practitioner	CIT 300T Computer Information Technology Transfer Elective	3

Cisco

NKU students who have taken and passed an examination from Cisco and hold a current certification (at the time of registering for classes) will receive credit for an equivalent NKU course. The chart below shows the semester credit hours and the equivalent NKU course.

EXAMINATION	EQUIVALENT NKU COURSE	TOTAL SEMESTER HOURS
CCNA Exam (200-301)	CIT 247 Networking Fundamentals CIT 447 Network Design/Troubleshooting	6
CCNP Security Core Exam (350-701)*	CYS 484 Network Security	3
Certified Entry Networking	CIT 247 Networking Fundamentals	3

*Credit given for exams taken after Summer 2020

Computing Technology Industry Association (CompTIA)

NKU students who have taken and passed an examination from CompTIA and hold a current certification (at the time of registering for classes) will receive credit for an equivalent NKU course. The chart below shows the semester credit hours and the equivalent NKU course.

EXAMINATION	EQUIVALENT NKU COURSE	TOTAL SEMESTER HOURS
Security+ (versions SY0-501 and later)	CYS 285 Cybersecurity Fundamentals	3
Network+	INF 284 Introduction to Computer Networks	3
Linux+	CIT 371 Unix Systems	3
A+	CIT 130 Informational Technology Fundamentals	3

Note: Students with Security+ exams SY0-401 and before will be required to take CYS 285.

GCTC AS TO NKU BS IN APPLIED SOFTWARE ENGINEERING CHECKLIST

Gateway Community and Technical College

Category 1: GCTC General Education 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 Sciences (SB)	3	TBD XXX	
TBS XXX	Social & Behavioral Sciences (SB)	3	TBD XXX	
TBS XXX	Natural Science with Lab (SL)	4	TBD XXX	
INF 120	Elementary Programming (NS)	3	INF 120	
MAT 171	Pre-Calculus (QR)	5		
STA 220	Statistics (QR)	3	STA 205	
Subtotal General Education Courses		36		

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.

*A grade of A or B in MAT 150 equates to MAT 103 + MAT 100T at NKU. A grade of C or D in MAT 150 equates to MAT 102 + MAT 100T.

MAT 171 Pre-Calculus is a pre-requisite for several NKU major courses.

Category 2: GCTC AS Requirements

GCTC Course	Course or Category	Credits	NKU Course	Completed
Taken at NKU	Introductory Discrete Mathematics (QR)	3	MAT 185	
	Subtotal AS Requirement Courses	3		

MAT 171 Precalculus is a prerequisite for several NKU major courses.

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	INF 101	
CIT 155	Web Page Design	3	INF 286	
CIT 160	Intro to Networking Concepts	4	INF 284	
CIT 149*	Java	3	CSC 260	
CIT 249	Java II	3	CSC 360	

GCTC Course	Course or Category	Credits	NKU Course	Completed
	Subtotal Elective Courses	22		
	TOTAL Associate Degree Hours	61		

*Completion of INF 120U satisfies the CIT 120 pre-requisite for CIT 149. Please contact your advisor for an override.

NKU Course Pre-requisites: MAT 185 (pre-req GCTC MAT 171), ASE 220 (pre-req of GCTC INF 120U and CIT 155)

Northern Kentucky University

Category 4: NKU Major Requirements for BS in Applied Software Engineering

NKU Course	Course	Credits	GCTC Course	Taken at GCTC
ASE 220	Full-Stack Application Development	3	Taken at NKU	x
ASE 230	Server-Side Programming	3		
ASE 285	Software Engineering & Security Fundamentals	3		
ASE 330	Human-Computer Interaction	3		
ASE 420	Software Design	3		
ASE 456	Cross-Platform Development	3		
ASE 485	Applied Software Engineering Capstone	3		
CIT 171	Introduction to Linux	1	Waived if completed CIT 227	x
CSC 260	Object-Oriented Programming	3	CIT 149	x
CSC 260L	Object-Oriented Programming Laboratory	1	Waived if CSC 260 completed	x
CSC 350	Database Programming	3	CIT 171	
CSC 360	Object-Oriented Programming II	3	CIT 249	x
INF 286	Introduction to Web Development	3	CIT 155	x
INF 120	Elementary Programming – NS	3	INF 120U	x
INF 284	Introduction to Computer Networks	3	CIT 160	x
INF 100	Orientation to College of Informatics	1		
INF 201*	Foundations of Informatics Professionals	1		
ENG 347	Technical Writing	3	ENG 204	
LDR 205	Human Relations in Organizations	3		
MAT 185	Introductory Discrete Mathematics – QR	3	Taken at NKU	x
PHI 310	Information Ethics	3		
STA 205	Statistical Methods – QR	3	STA 220	x
TBS XXX	Any advanced 3-hour course (3xx/4xx) not listed above with an ASE, CIT, CSC, CYS, or DSC designator.	3	CIT 184 = CYS 330 CIT 284 = CYS 430 CIT 206 + CIT 207 = CIT 438	
ASE 305 ASE 306	Experiential Learning: ASE Dept. Peer Mentorship Training AND ASE Dept. Peer Mentorship OR	0-3		

NKU Course	Course	Credits	GCTC Course	Taken at GCTC
ASE x92 ASE x96 CEP 300	Applied Software Engineering Research OR Applied Software Eng. Practicum OR Cooperative Education			
	Subtotal Major Credit Hours at NKU	36-39		
	Subtotal Major Credit Hours GCTC	24		
	Total Major Credit Hours	60-63		
	Subtotal of Additional Credit Hours Completed at GCTC	37		

*BUS 201 can substitute for INF 201. Also, students who have accumulated 2+ years of industry experience can write a paragraph justifying why INF 201 should be waived and submit it to the program head, and the course may be waived on a case-by-case basis.

Category 5: Additional Requirements at NKU

NKU Course	Course	Credits	GCTC Course	Taken at GCTC
	Subtotal Minor/Focus/Electives Credit Hours *15 must be 300-level or higher	23		
	Total Baccalaureate Degree Credit Hours	120		

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