



TWO DEGREES, ONE PATH

TRANSFER PATHWAY GUIDE 2024-2025

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 the 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) cultural competence course, 5) demonstration of digital literacy, and 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. Students must complete a focus or minor as indicated on the pathway.

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.

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.

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)*	CIT 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)	CIT 285 Cybersecurity Fundamentals	3
Network+	INF 284 Introduction to Computer Networks	3

Note: Students with Security+ exams SY0-401 and before will be required to take CIT 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 150	College Algebra (QR)	3	(MAT 102 or MAT 103) + MAT 100T	
STA 220	Statistics (QR)	3	STA 205	
	Subtotal General Education Courses	34		

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.

Category 2: GCTC AS Requirements

GCTC Course	Course or Category	Credits	NKU Course	Completed
Taken at NKU	Introductory Discrete Mathematics (QR)	3	MAT 185	
MAT 171	Pre-Calculus (QR)	5	MAT 103 + MAT 119	
	Subtotal AS Requirement Courses	8		

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	Achieving Academic Success	3	UNV 100T	
CIT 105	Introduction to Computers	3	BIS 101	
CIT 155	Web Page Design	3	INF 286	
CIT 160	Intro to Networking Concepts	4	INF 284	
CIT 217	UNIX/Linux Administration	3	CIT 171 + CIT 100T	

GCTC Course	Course or Category	Credits	NKU Course	Completed
CIT 120	Computational Thinking	3	INF 100T	
CIT 149	Java I	3	CSC 260	
	Subtotal Elective Courses	22		
	TOTAL Associate Degree Hours	64		

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 BS in Applied Software Engineering

NKU Course	Course	Credits	GCTC Course	Taken at GCTC
ASE 220	Full-Stack Application Development	3		
ASE 230	Server-Side Programming	3	CIT 241	
ASE 285	Software Engineering & Security Fundamentals	3	CS 216U	
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	CIT 217	x
CSC 260	Object-Oriented Programming	3	CIT 149	x
CSC 260L	Object-Oriented Programming Laboratory	1	Waived if INF 260 completed	
CSC 350	Database Programming	3		
CSC 360	Object-Oriented Programming II	3	CIT 249	
INF 286	Introduction to Web Development	3	CIT 155	x
INF 120	Elementary Programming – NS	3	INF 120	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 253 = CSC 301	
ASE 305 ASE 306 ASE x92 ASE x96 CEP 300	Experiential Learning: ASE Dept. Peer Mentorship Training AND ASE Dept. Peer Mentorship OR Applied Software Engineering Research OR Applied Software Eng. Practicum OR Cooperative Education	0-3		

NKU Course	Course	Credits	GCTC Course	Taken at GCTC
	Subtotal Major Credit Hours at NKU	42-45		
	Subtotal Major Credit Hours GCTC	19		
	Total Major Credit Hours	61-64		

Category 5: Additional Requirements at NKU

NKU Course	Course	Credits	GCTC Course	Taken at GCTC
	Subtotal Minor/Focus Credit Hours	12-24		
	Subtotal Elective Credit Hours (300 level or above)	3-18		
	Total Baccalaureate Degree Credit Hours	121-136		

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