TRANSFER PATHWAY GUIDE
2023-2024

Associate in Science to Bachelor of Science in Cybersecurity

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 Cybersecurity 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 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 some cases, 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
Linux+	CIT 371 Unix Systems	3

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

GCTC AS TO NKU BS IN CYBERSECURITY 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	
COM 181	Basic Public Speaking (OC)	3	CMST 101	
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 120U	Elementary Programming (NS)	3	INF 120	
MAT 171	Precalculus (QR)	5	MAT 119	
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.

MAT 171 Precalculus is a prerequisite for NKU CSC 360: Object-Oriented Programming II.

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 NKU CSC 360: Object-Oriented Programming II.

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 160	Introduction to Networking Concepts	4	INF 284	
CIT 111	Computer Hardware and Software	4	CIT 130	
CIT 180	Security Fundamentals	3	CIT 180 + CIT 185 = CYS 285	
CIT 182	Perimeter Defense	3	CIT 180 + CIT 185 = CYS 285	
CIT 227	Introduction to UNIX/Linux Administration	3	CIT 171 + CIT 100T	
	Subtotal Elective Courses	**23**		

GCTC Course	Course or Category	Credits	NKU Course	Completed
	TOTAL Associate Degree Hours	**62**		

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

CIT 227 at Gateway is equivalent to CIT 171 at NKU. However, if the student passes their CompTIA certification, they will also receive credit for CIT 371 at NKU.

Students may choose to take CIT 149 Java 1 and CIT 155 Web Page Development in place of CIT 180 and CIT 182.

Northern Kentucky University

Category 4: NKU Major Requirements for BS in Cybersecurity

NKU Course	Course	Credits	GCTC Course	Taken at GCTC
CYS 310	Cybersecurity Risk Management	3		
CYS 444	Software Security	3		
CIT 130	Information Technology Fundamentals	3	CIT 111	x
CIT 171	Introduction to Linux	1	CIT 227	x
CIT 371	Unix Systems	3		
CYS 285	Cybersecurity Fundamentals	3	CIT 180 + CIT 182	x
CYS 330	Introduction to Ethical Hacking	3		
CYS 385	Cybersecurity Analysis I	3		
CYS 485	Cybersecurity Analysis II	3		
ASE 230	Server-Side Programming	3		
CSC 260	Object-Oriented Programming I	3	CIT 149	
CSC 350	Database Programming	3		
CSC 360	Object-Oriented Programming II	3		
CSC 362	Computer Systems	3		
CSC 364	Data Structures and Algorithms	3		
CSC 460	Operating Systems	3		
CSC 482	Computer Security	3		
BIS 300	Management Information Systems	3		
BIS 382	Principles of Information Security	3		
INF 100	Orientation to College of Informatics	1		
INF 120	Elementary Programming	3	INF 120U	x
INF 201	Foundations of Informatics Professionals	1		
INF 284	Introduction to Computer Networks	3	CIT 160 or CIT 161	x
INF 286	Introduction to Web Development	3	CIT 155	
MAT 185	Introductory Discrete Mathematics	3	Taken at NKU	x
PHI 310	Information Ethics	3		
STA 205	Statistical Methods	3	STA 220	x
Select 6 cr:	Select 6 credit hours from the following:	6		

NKU Course	Course	Credits	GCTC Course	Taken at GCTC
ASE 456	Cross-Platform Development (3 cr)			
BIS 330	IT Project Management (3 cr)			
CIT 381	Raspberry PI Based IoT (3 cr)			
CIT 383	Scripting I (3 cr)			
CIT 396	Computer Information Technology Practicum (0-3 cr)			
CIT 438	Cloud Computing (3 cr)			
CIT 470	Advanced Network and System Administration (3 cr)			
CIT 472	Database Administration (3 cr)			
CIT 483	Scripting II (3 cr)			
CMST 370	Advanced Public Speaking (3 cr)			
CSC 396	Computer Science Practicum (0-3 cr)			
CSC 415	Mobile App Development (3 cr)			
CSC 425	Artificial Intelligence (3 cr)			
CYS 305	Peer Teaching Assistant Training & Practicum (3 cr)			
CYS 330	Introduction to Ethical Hacking (3 cr)			
CYS 392	Intermediate Research Experience in CYS (0-3 cr)			
CYS 394	Intermediate Topics: Cybersecurity (1-3 cr)			
CYS 396	Cybersecurity Practicum (0-3 cr)			
CYS 399	Intermediate Independent Study: CYS (1-3 cr)			
CYS 430	Computer Forensics (3 cr)			
CYS 484	Network Security (3 cr)			
CYS 492	Advanced Research Experience in CYS (0-3 cr)			
CYS 494	Advanced Topics: Cybersecurity (1-3 cr)			
CYS 499	Advanced Independent Study: CYS (1-3 cr)			
MAT 483	Cryptology			
	Experiential learning experience. See NKU Catalog or talk to an NKU advisor about options.			
	Subtotal Major Credit Hours at NKU	**62**		
	Subtotal Major Credit Hours GCTC	**19**		
	Total Major Credit Hours	**81**		
	Total Baccalaureate Degree Credit Hours	**124**		

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