

TRANSFER PATHWAY GUIDE 2021-2022

Associate of Applied Science in Computer and Information Technologies – Information Security Track to Bachelor of Science in Computer Information Technology – All Tracks

Overview

Completion of the following curriculum will satisfy the requirements for the Associate of Applied Science (AAS) in Computer and Information Technologies (Information Security Track) degree at a Kentucky Community and Technical College System (KCTCS) institution and leads to the Bachelor of Science (BS) in Computer Information Technology degree at Northern Kentucky University (NKU).

Applying to the KCTCS2NKU 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 their KCTCS institution, enrolled in an associate degree program, plan to transfer to NKU, and maintain a minimum 2.0 cumulative GPA at their KCTCS institution.

Degree Requirements for KCTCS

1) Minimum cumulative GPA 2.0, 2) minimum of 25 percent of credit hours required for the degree earned at the institution awarding the degree, and 3) demonstration of digital literacy.

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, including earning a C- or better in all courses that count for the major or minor. 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 a KCTCS institution.

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	TION EQUIVALENT NKU COURSE	
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 SYO-401 and before will be required to take CIT 285.

KCTCS AAS IN COMPUTER & INFORMATION TECHNOLOGIES – INFORMATION SECURITY TRACK TO NKU BS IN COMPUTER INFORMATION TECHNOLOGY CHECKLIST

Kentucky Community and Technical College System

Category 1: KCTCS General Education Requirements

KCTCS Course	Course or Category	Credits	NKU Course	Completed
ENG 101	Writing I (WC)	3	ENG 101	
MAT 150 or MAT 161	College Algebra (QR) or Statistics and Algebra (QR)	3-5	(MAT 102 or MAT 103) + MAT 100T or MAT 101 + MAT 102	
TBS XXX	Social & Behavioral Sciences (SB)	3	TBD XXX	
TBS XXX	Arts & Humanities (AH) Heritage or Humanities	3	TBD XXX	
TBS XXX	Natural Science (NS or SL)	3	TBD XXX	
	Subtotal General Education Courses	15-17		

TBS XXX means to be selected by KCTCS student.

TBD XXX means to be determined by NKU based on course selected.

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

Students who do not complete a science course with a lab will be required to take an additional science with a lab at NKU.

Category 2: KCTCS AAS Requirements for Computer and Information Technologies – Information Security Track

KCTCS Course	Course or Category	Credits	NKU Course	Completed
CIT 105	Introduction to Computers	3	BIS 101	
CIT 111	Computer Hardware and Software	4	CIT 130	
CIT 217	UNIX/Linux Net Infrastructure (CIT Technical)	3	CIT 171	
CIT 160 or CIT 161	Intro to Networking Concepts (Level I Networking) or Introduction to Networks (Level I Networking)	4	INF 284	
CIT 120	Computational Thinking	3	INF 100T	
CIT 141 or CIT 142 or	Level I Programming Language Course: PHP I or C++ I or	3	(CIT 149 =	
CIT 143 or	C# I or		CSC 260)	

KCTCS	Course or Category	Credits	NKU	Completed
Course	course of eategory	Cicuits	Course	Completed
CIT 144 or	Python I or			
CIT 145 or	Perl I or			
CIT 146 or	Swift I or			
CIT 147 or	Programming I: Language or			
CIT 148 or	Visual Basic I or			
CIT 149 or	Java I or			
CS 115	Introduction to Computer Programming			
CIT 167	Routing & Switching Essentials (Network Elective)	4	CIT 247	
CIT 170	Database Design Fundamentals	3	INF 282	
CIT 180 +	Security Fundamentals +	3	CIT 285 +	
CIT 182	Perimeter Defense	3	CIT 100T	
CIT 184	Attacks and Exploits	3	CIT 100T	
CIT 21.4	Misses of Conseq Configuration (CIT Took miss)	3	INF 284 or	
CIT 214	Microsoft Server Configuration (CIT Technical)	3	INF 200T	
CIT 215	Microsoft Server Administration (Network Elective)	3	CIT 271	
	Security Elective			
CIT 284 or	Computer Forensics or			
CIT 285 or	Windows OS Security or	3	CIT 200T	
CIT 286 or	UNIX/Linux OS Security or	3	C11 2001	
CIT 287 or	Cisco OS Security or			
CIT 288	Network Security			
CIT 293	CIT Employability Studies	1	INF 201	
	Total Associate Degree Hours	61-63		

Northern Kentucky University

Category 3: NKU Additional General Education Courses

NKU Course	Course or Category	Credits	KCTCS Course	Taken at KCTCS
ENG 102	Advanced College Writing	3	ENG 102	
CMST 101	Public Speaking	3	COM 181	
TBS XXX	Science with Lab	4		
TBS XXX	Self & Society	6		
TBS XXX	Culture & Creativity	3		
TBS XXX	Global Viewpoints	3		
	Subtotal General Education Credit Hours	22		

Category 4: NKU Major Requirements for BS in Computer Information Technology

NKU Course	Course	Credits	KCTCS Course	Taken at KCTCS
INF 100	Orientation to College of Informatics	1	Waived for students with AAS degree	
INF 120	Elementary Programming	3	CIT 141 or CIT 142 or CIT 143 or CIT 144 or CIT 145 or CIT 146 or CIT 147 or CIT 148 or CIT 149 or CS 115	х
INF 282	Introduction to Databases	3	CIT 170	Х
INF 284	Introduction to Computer Networks	3	CIT 160 or CIT 161 or CIT 214	х
INF 286	Introduction to Web Development	3	CIT 150 or CIT 155	
CIT 130	Information Technology Fundamentals	3	CIT 111	Х
CIT 171	Introduction to Linux	1	CIT 217	Х
CIT 271	Windows Administration	3	CIT 215 or CIT 216	Х
CIT 285	Cybersecurity Fundamentals	3	CIT 180 +CIT 182 = CIT 285 +CIT 100T	х
CIT 371	Unix Systems	3		
CIT 383	Scripting I	3		
STA 205 or STA 250	Statistical Methods or Probability and Statistics	3	STA 220 or (MAT 151 or STA 151 or MAT 161) + STA 251	
PHI 310	Information Ethics	3		
ENG 347	Technical Writing	3	ENG 204	
	Select one track from following tracks: Network and System Administration Track Web and Database Administration Track Cybersecurity Track Non-Specialist Track (Required courses are listed in Categories 6-9 tables below.)	18		
	Subtotal Major Credit Hours at NKU	37		
	Subtotal Major Credit Hours KCTCS	19		
	Total Major Credit Hours	56		

Category 5: Additional Requirements at NKU

NKU Course	Course	Credits	KCTCS Course	Taken at KCTCS
	Subtotal Focus/Minor Credit Hours Note: Any NKU focus or minor may be selected. Information Systems and Computer Science are common choices and require 9-15 additional	12-24		

NKU Course	Course	Credits	KCTCS Course	Taken at KCTCS
	credit hours beyond the major. (Required courses for these minors are listed in Categories 10-11 tables below.)			
	Total Baccalaureate Degree Credit Hours	128-142		

Note: Depending on track, focus/minor, and courses chosen, students may need additional electives to meet the 45-hour upper level graduation requirement. Work with your NKU advisor to make sure you meet all graduation requirements.

Students must choose a track as part of the Computer Information Technology major. The course requirements for the tracks are listed in Category 6 tables below.

Category 6: NKU Major Requirements for the Network and System Administration Track

NKU Course	Course	Credits	KCTCS Course	Taken at KCTCS
CIT 247	Networking Fundamentals	3	CIT 167	
CIT 447	Network Design/Troubleshooting	3		
CIT 470	Advanced Network and System Administration	3		
CIT 484	Network Security	3		
CIT XXX	300/400-level CIT Course (not listed above)	3		
CIT XXX	300/400-level CIT Course (not listed above)	3		
	Additional Credit Hours for Track	18		

Category 7: NKU Major Requirements for the Web and Database Administration Track

NKU Course	Course	Credits	KCTCS Course	Taken at KCTCS
CSC 260	Object-Oriented Programming I	3	CIT 149	
CSC 360 or CIT 483	Object-Oriented Programming II or Scripting II	3	CIT 249 = CSC 360	
ASE 230	Server-Side Programming	3	IMD 133 + IMD 180 + IMD 230 = INF 286 + ASE 230 + MIN 200T	
CIT 436	Web Server Administration	3		
CIT 472	Database Administration	3		
ASE 456 or CIT XXX	Cross-Platform Development or One 300/400-level CIT course (not listed above)	3		
	Additional Credit Hours for Track	18		

Category 8: NKU Major Requirements for the Cybersecurity Track

NKU Course	Course	Credits	KCTCS Course	Taken at KCTCS
CIT 247	Networking Fundamentals	3	CIT 167	
CIT 430	Computer Forensics	3		
CIT 484	Network Security	3		
CIT 485	Advanced Cybersecurity	3		
TBS XXX	300/400-level CIT or CYS Course (not listed above)	3		
TBS XXX	300/400-level CIT or CYS Course (not listed above)	3		
	Additional Credit Hours for Track	18		

BIS 382, CSC 482, and CSC 483 may count as the CIT elective in the Cybersecurity Track.

Category 9: NKU Major Requirements for the Non-Specialist Track

NKU Course	Course	Credits	KCTCS Course	Taken at KCTCS
CSC 260	Object-Oriented Programming I	3	CIT 149	
CSC 360 or	Object-Oriented Programming II or	3	CIT 249 = CSC 360	
CIT 483	Scripting II			
CIT 436 or	Web Server Administration or			
CIT 438 or	Cloud Computing or	3		
CIT 472	Database Administration			
CIT 470 or	Advanced Network and System			
CIT 485	Administration or	3		
	Advanced Cybersecurity			
TBS XXX	300/400-level CIT or CYS Course (not listed	3		
	above)			
TBS XXX	300/400-level CIT or CYS Course (not listed	3		
	above)			
	Additional Credit Hours for Track	18		

Students may choose one of the following minors listed below in Category 7 tables or any other minor offered at NKU.

Category 10: NKU Requirements for the Information Systems Minor

NKU Course	Course	Credits	KCTCS Course	Taken at KCTCS
			CIT 141 or CIT 142 or	
INF 120	Elementary Programming	3	CIT 143 or CIT 144 or CIT 145 or CIT 146 or CIT 147 or CIT 148 or	х
			CIT 149 or CS 115	
INF 282	Introduction to Databases	3	CIT 170	Х

NKU Course	Course	Credits	KCTCS Course	Taken at KCTCS
INF 286	Introduction to Web Development (Counted above in major)	3	CIT 150 or CIT 155	
BIS 275	Introduction to Business Analysis	3		
BIS 300	Management Information Systems	3		
BIS 310	Information Systems Analysis	3	CIT 291	
BIS 330	IT Project Management	3		
TBS XXX	One 300/400-level BIS or CYS course from list of courses in the NKU Undergraduate Catalog under Information Systems Minor	3		
	Additional Credit Hours for Minor	15		

Category 11: NKU Requirements for the Computer Science Minor

NKU Course	Course	Credits	KCTCS Course	Taken at KCTCS
INF 120	Elementary Programming	3	CIT 141 or CIT 142 or CIT 143 or CIT 144 or CIT 145 or CIT 146 or CIT 147 or CIT 148 or CIT 149 or CS 115	х
CSC 260	Object-oriented Programming I	3	CIT 149	
CSC 360	Object-oriented Programming II	3	CIT 249	
CSC 362 or CSC 364	Computer Systems or Data Structures and Algorithms	3		
CSC XXX	One 300/400-level CSC course (not listed above)	3		
CSC XXX	One 300/400-level CSC course (not listed above)	3		
Select 2: ASE XXX INF XXX CSC XXX CIT XXX CYS XXX DSC XXX	Two 300/400-level ASE, INF, CSC, CIT, CYS or DSC courses not included above (met by CIT major requirements)	6		
	Additional Credit Hours for Minor	15		

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