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# TWO DEGREES, ONE PATH

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## TRANSFER PATHWAY GUIDE 2023-2024

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.

The Computer Information Technology, B.S. – Cloud and Systems Administration Track is offered both face-to-face and online.

### ***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 toward the major or minor. 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	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

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

<b>KCTCS Course</b>	<b>Course or Category</b>	<b>Credits</b>	<b>NKU Course</b>	<b>Completed</b>
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	
	<b>Subtotal General Education Courses</b>	<b>15-17</b>		

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**

<b>KCTCS Course</b>	<b>Course or Category</b>	<b>Credits</b>	<b>NKU Course</b>	<b>Completed</b>
CIT 105	Introduction to Computers	3	BIS 101	
CIT 111	Computer Hardware and Software	4	CIT 130	
CIT 227	Introduction to UNIX/Linux Administration	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 CIT 143 or	Level I Programming Language Course: PHP I or C++ I or C# I or	3	INF 120 INF 120 INF 120	

KCTCS Course	Course or Category	Credits	NKU Course	Completed
CIT 144 or CIT 145 or CIT 146 or CIT 147 or CIT 148 or CIT 149 or CS 115	Python I or Perl I or Swift I or Programming I: Language or Visual Basic I or Java I or Introduction to Computer Programming		INF 120 INF 120 INF 120 INF 120 INF 120 CSC 260 INF 120	
CIT 170	Database Design Fundamentals	3	INF 282	
CIT 180 + CIT 182	Security Fundamentals + Perimeter Defense	3 3	CYS 285 + CIT 100T	
CIT 184	Attacks and Exploits	3	CIT 100T	
CIT 214	Microsoft Server Configuration (CIT Technical)	3	INF 284	
CIT 215	Microsoft Server Administration (Network Elective)	3	CIT 271	
TBS XXX	Approved Network Elective (One possibility is CIT 167)	3		
CIT 284 or CIT 285 or CIT 286 or CIT 287 or CIT 288	Security Elective Computer Forensics or Windows OS Security or UNIX/Linux OS Security or Cisco OS Security or Network Security	3	CIT 200T	
CIT 290 or CIT 291 or CIT 293 or CIT 297	Internship or CIT Capstone or CIT Employability Studies or CIT Professional Preparation	1-3	BIS 310 BIS 310 INF 201	
	<b>Total Associate Degree Hours</b>	<b>60-62</b>		

### 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		
	<b>Subtotal General Education Credit Hours</b>	<b>22</b>		

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

<b>NKU Course</b>	<b>Course</b>	<b>Credits</b>	<b>KCTCS Course</b>	<b>Taken at KCTCS</b>
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	x
INF 282	Introduction to Databases	3	CIT 170	x
INF 284	Introduction to Computer Networks	3	CIT 160 or CIT 161 or CIT 214	x
INF 286	Introduction to Web Development	3	CIT 150 or CIT 155	
CIT 130	Information Technology Fundamentals	3	CIT 111	x
CIT 171	Introduction to Linux	1	CIT 227	x
CIT 271	Windows Administration	3	CIT 215 or CIT 216	x
CYS 285	Cybersecurity Fundamentals	3	CIT 180 +CIT 182 = CYS 285 +CIT 100T	x
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 Administration Track Cloud and System Administration Track Cybersecurity Track (Required courses are listed in Categories 6-8 tables below.)	15-21		
	<b>Subtotal Major Credit Hours at NKU</b>	<b>33-39</b>		
	<b>Subtotal Major Credit Hours KCTCS</b>	<b>19</b>		
	<b>Total Major Credit Hours</b>	<b>52-58</b>		

**Category 5: Additional Requirements at NKU**

NKU Course	Course	Credits	KCTCS Course	Taken at KCTCS
	<b>Electives</b>	0		
	<b>Subtotal Focus/Minor Credit Hours</b>	9-24		
	<b>Minimum Total Baccalaureate Degree Credit Hours</b>	<b>124</b>		

Notes: Any NKU focus or minor may be selected. Information Systems and Computer Science are common choices and require 9-15 additional credit hours beyond the courses taken for the major.

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	x
CIT 447	Network Design/Troubleshooting	3		
CIT 470	Advanced Network and System Administration	3		
CYS 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		
	<b>Additional Credit Hours for Track</b>	<b>15</b>		

**Category 7: NKU Major Requirements for the Cloud and System Administration Track**

NKU Course	Course	Credits	KCTCS Course	Taken at KCTCS
CIT 436	Web Server Administration	3		
CIT 438	Cloud Computing	3		
CIT 470	Advanced Network and System Administration	3		
CIT 472	Database Administration	3		
CIT XXX or CYS 439	Add two electives from CIT 300/400 or CYS 439	6		
	<b>Additional Credit Hours for Track</b>	<b>18</b>		

**Category 8: NKU Major Requirements for the Cybersecurity Track**

NKU Course	Course	Credits	KCTCS Course	Taken at KCTCS
CYS 330	Introduction to Ethical Hacking	3		
CYS 385	Cybersecurity Analysis I	3		

NKU Course	Course	Credits	KCTCS Course	Taken at KCTCS
CYS 484	Network Security	3		
CYS 485	Advanced Cybersecurity	3		
CIT/CYS XXX	Two 300/400-level CIT or CYS courses (not included above); BIS 382, CSC 482, and CSC 483 may count toward these electives	6		
TBS XXX	300/400-level CIT or CYS Course (not listed above)	3		
	<b>Additional Credit Hours for Track</b>	<b>21</b>		

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