

# TRANSFER PATHWAY GUIDE 2024-2025

Associate of Applied Science in Computer and Information Technologies – Programming Track to Bachelor of Science in Information Technology

#### Overview

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

<sup>\*</sup>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 – PROGRAMMING TRACK TO NKU BS IN INFORMATION TECHNOLOGY TRACK 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 Computer and Information Technologies – Programming 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 120	Computational Thinking	3	INF 100T	
CIT 144	Python I (Level I Programming Language)	3	INF 120	
CIT 149	Java I (Level I Programming Language)	3	CSC 260	
CIT 249	Java II (Level II Programming Language)	3	CSC 200T	
	Level I Programming Language Course:			
CIT 141 or	PHP I or			
CIT 142 or	C++ I or			
CIT 143 or	C# I or	3	INF 120	
CIT 145 or	Perl I or			
CIT 146 or	Swift I or			
CIT 147 or	Programming I: Language or			

KCTCS Course	Course or Category	Credits	NKU Course	Completed
CIT 148 or	Visual Basic I or			
CS 115	Introduction to Computer Programming			
	Level II Programming Language Course:			
CIT 237 or	iOS Programming or		CSC 200T	
CIT 238 or	Android Programming or		CSC 260	
CIT 241 or	PHP II or		ASE 230	
CIT 242 or	C++ II or		CSC 200T	
CIT 243 or	C# II or	3	INF 120	
CIT 244 or	Python II or		INF 200T	
CIT 247 or	Programming II: Language or		INF 120	
CIT 248 or	Visual Basic II or		INF 110	
CS 215	Intro Program Design, Instruction, and Problem		CSC 260	
	Solving			
CIT 150 or	Internet Technologies (CIT Technical) or	3	INF 286	
CIT 155	Web Page Development (CIT Technical)	3	INF 200	
CIT 160 or	Intro to Networking Concepts (Level I Networking)	4	INF 284	
CIT 161	or Introduction to Networks (Level I Networking)	4	INF 204	
CIT 170	Database Design Fundamentals	3	INF 282	
CIT 180 +	Security Fundamentals and	3	CYS 285 +	
CIT 182	Perimeter Defense (CIT Technical)	3	CIT 200T	
CIT 253	Data Driven Web Pages: Topic	3	ASE 220	
CIT 290 or	Internship or		BIS 310	
CIT 291 or	CIT Capstone or	1-3	BIS 310	
CIT 293 or	CIT Employability Studies or	1-3	INF 201	
CIT 297	CIT Professional Preparation			
	Total Associate Degree Hours	60-64		

## **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 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 CS 115	х
INF 282	Introduction to Databases	3	CIT 170	Х
INF 284	Introduction to Computer Networks	3	CIT 160 or CIT 161	х
INF 286	Introduction to Web Development	3	CIT 150 or CIT 155	х
CIT 130	Information Technology Fundamentals	3	CIT 111	х
CIT 171	Introduction to Linux	1	CIT 217	
CIT 271	Windows Administration	3	CIT 215 or CIT 216	
CIT 371	Linux System Administration	3		
CIT 383	Scripting I	3		
CYS 285	Cybersecurity Fundamentals	3	CIT 180 + CIT 182 = CYS 285 + CIT 100T	х
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 General Track (Required courses are listed in Categories 6-9 tables below.)	18		
	Subtotal Major Credit Hours at NKU	37		
	Subtotal Major Credit Hours KCTCS	18		
	Total Major Credit Hours	55		

**Category 5: Additional Requirements at NKU** 

NKU Course	Course	Credits	KCTCS Course	Taken at KCTCS
	Electives	0-8		
	Subtotal Focus/Minor Credit Hours	9-24		
	Minimum Total Baccalaureate Degree Credit Hours	128		

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

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.

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 438	Cloud Computing	3		
CIT 447	Network Design/Troubleshooting	3		
CIT 470	Advanced Network and System Administration	3		
CYS 484	Network Security	3		
TBS XXX	Select one 300/400-level CIT course not included	3		
102 444	above. CSC 481 can count toward this elective.	5		
	Additional Credit Hours for Track	18		

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		
TBS XXX	Select six hours of CIT 300/400 level courses not listed above; CYS 439 and CSC 481 can count toward these electives.	6		
	Additional Credit Hours for Track	18		

**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		
CYS 484	Network Security	3		
CYS 485	Advanced Cybersecurity	3		
TBS XXX	Select two 300/400-level CIT or CYS courses not included above; BIS 382, CSC 481; CSC 482, and CSC 483 may count toward these electives	6		
	Additional Credit Hours for Track	18		

Category 9: NKU Major Requirements for the General Track

NKU Course	Course	Credits	KCTCS Course	Taken at KCTCS
CIT 436 or	Web Server Administration or	3		
CIT 438	Cloud Computing	3		
CIT 470 or	Advanced Network and System Administration or	3		
CIT 472	Database Administration	3		
CYS 330 or	Introduction to Ethical Hacking or	3		
CYS 385	Cybersecurity Analysis I	3		
	Select 9 credit hours of 300/400 CIT or CYS			
TBS XXX	coursework not taken above. CIT 247 and CSC 481	9		
182 333	may count toward these electives. No more than 6	9		
	hours may be taken from CIT/CYS 392/399/492/499.			
	Additional Credit Hours for Track	18		

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