

# TRANSFER PATHWAY GUIDE

## 2021-2022

Associate of Applied Science in Computer Information Systems/Network Engineering at Sinclair College to a Bachelor of Science in Computer Information Technology at Northern Kentucky University

### **Overview**

Completion of the following curriculum will satisfy the requirements for the Associate of Applied Science (AAS) in Computer Information Systems/Network Engineering degree at Sinclair College and leads to the Bachelor of Science (BS) in Computer Information Technology degree at Northern Kentucky University (NKU).

### **Degree Requirements for Sinclair College**

To earn a degree at Sinclair College, a student must complete a minimum of 60 credit hours, attain a minimum cumulative GPA of 2.0, and earn a minimum of 20 credit hours at Sinclair College.

### **Admission Requirements for NKU**

Students completing an associate degree with a cumulative GPA of 2.0 or higher will be accepted into NKU.

### **Tuition and Scholarships**

For information on tuition and scholarships, please visit <https://nku.edu/admissions/adult/online.html>

### **NKU Contacts**

Students can contact the College of Informatics Advising Center by email or phone. Information can be found at <https://www.nku.edu/academics/informatics/advising/ourpeople.html>.

### **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.

**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.

**SINCLAIR COLLEGE AAS IN COMPUTER INFORMATION SYSTEMS/NETWORK ENGINEERING TO  
NKU BS IN COMPUTER INFORMATION TECHNOLOGY CHECKLIST**

**Sinclair College**

**Category 1: Sinclair Requirements for the AAS in Computer Information Systems/Network Engineering**

<b>Sinclair Course</b>	<b>Course or Category</b>	<b>Credits</b>	<b>NKU Course</b>	<b>Completed</b>
ACC 1100 or ACC 1210	Survey of Accounting or Introduction to Financial Accounting	3	ACC 100T ACC 200	
BIS 1120	Introduction to Software Applications	3	BIS 101	
CIS 1107	Introduction to Operating Systems	3	CIS 1107 + CIS 2731 = CIT 130 + CIT 200T	
CIS 1111	Introduction to Problem Solving & Computer Programming	3	INF 100T	
CIS 1140	Information Systems Analysis & Design	3	BIS 310	
CIS 1411	Cisco Network Fundamentals	3	INF 284	
CIS 2170 or CIS 2178	Computer Information Systems Internship or Computer Information Systems Capstone	3	CEP 300 CIT 200T	
CIS 2165	Database Management	3	INF 282	
CIS 2416	Cisco Routing Protocols & Concepts	4	CIT 247 + CIT 200T	
CIS 2421	Cisco Switching & Wireless Routing	4	CIT 200T	
CIS 2426	Cisco Accessing the Wide Area Network (WAN)	4	CIT 200T	
CIS 2640	Network Security	3	CYS 200T	
CIS 2731	A+ Hardware & Software	4	CIS 1107 + CIS 2731 = CIT 130 + CIT 200T	
COM 2225	Small Group Communication	3	CMST 230	
ECO 2160	Principles of Macroeconomics	3	ECO 200	
ENG 1101	English Composition I	3	ENG 101	
MAN 2150	Management & Organizational Behavior	3	MGT 205	
MAT 1120 or TBS XXX	Business Mathematics or Ohio Transfer 36: Mathematics (choose MAT 1450 for NKU major)	3	STA 100G, TBD XXX or (STA 205)	
SCC 1101	First Year Experience	1	UNV 101	
TBS XXX	Ohio Transfer 36: Arts & Humanities	3	TBD XXX	
	<b>Total Associate Degree Hours</b>	<b>61-62</b>		

TBS XXX means to be selected by Sinclair College student.

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

## Northern Kentucky University

### Category 2: NKU Additional General Education Requirements

NKU Course	Course	Credits	Sinclair Course	Taken at Sinclair
ENG 102	Advanced College Writing	3	ENG 1201	
TBS XXX	Oral Communication	3	COM 2211	
TBS XXX	Natural Science	4		
TBS XXX	Cultural Pluralism	3		
TBS XXX	Individual & Society	3		
TBS XXX	Culture & Creativity	3		
TBS XXX	Global Viewpoints	3		
<b>Subtotal General Education Courses</b>		<b>22</b>		

### Category 3: NKU Major Requirements for the BS in Computer Information Technology

NKU Course	Course	Credits	Sinclair Course	Taken at Sinclair
INF 100	Orientation to College of Informatics	1	Waived for students with AAS degree	x
INF 120	Elementary Programming	3	CIS 1202	
INF 282	Introduction to Databases	3	CIS 2165	x
INF 284	Introduction to Computer Networks	3	CIS 1130	
INF 286	Introduction to Web Development	3	CIS 1350	
CIT 130	Information Technology Fundamentals	3	CIS 1107 + CIS 2731	x
CIT 171	Intro to Linux	1	CIS 2550	
CIT 271	Windows Administration	3	CIS 1510 + CIS 2510	
CIT 285	Cybersecurity Fundamentals	3	CIS 2670	
CIT 371	Unix Systems	3		
CIT 383	Scripting I	3		
STA 205 or STA 250	Statistical Methods or Probability and Statistics	3	MAT 1450	Can be taken at Sinclair
PHI 310	Information Ethics	3		
ENG 347	Technical Writing	3		
	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 5- 8 tables below.)	18		

NKU Course	Course	Credits	Sinclair Course	Taken at Sinclair
	<b>Total NKU Major Credit Hours</b>	<b>56</b>		
	<b>Less Major Credit Hours from Sinclair</b>	<b>7-13</b>		
	<b>Subtotal Major Credit Hours at NKU</b>	<b>43-49</b>		

#### Category 4: Additional Requirements at NKU

NKU Course	Course	Credits	Sinclair Course	Taken at Sinclair
	<b>Subtotal Minor/Focus Credit Hours</b> Note: 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.	<b>9-24</b>		
	<b>Minimum Total Baccalaureate Degree Credit Hours</b>	<b>135</b>		

Note: Depending on track, focus/minor, and courses chosen, total credit hours for the baccalaureate degree may be higher and 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 5: NKU Major Requirements for the Network and System Administration Track

NKU Course	Course	Credits	Sinclair Course	Taken at Sinclair
CIT 247	Networking Fundamentals	3	CIS 2416	x
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		
	<b>Additional Credit Hours for Track</b>	<b>15</b>		

#### Category 6: NKU Major Requirements for the Web and Database Administration Track

NKU Course	Course	Credits	Sinclair Course	Taken at Sinclair
CSC 260	Object-Oriented Programming I	3	CIS 2212	
CSC 360	Object-Oriented Programming II	3	CIS 2217	
ASE 230	Server-Side Programming	3	CIS 2250	
CIT 436	Web Server Administration	3		
CIT 472	Database Administration	3		

NKU Course	Course	Credits	Sinclair Course	Taken at Sinclair
ASE 456 or CIT XXX	Cross-Platform Development or One 300/400-level CIT course (not listed above)	3		
<b>Additional Credit Hours for Track</b>		<b>18</b>		

**Category 7: NKU Major Requirements for the Cybersecurity Track**

NKU Course	Course	Credits	Sinclair Course	Taken at Sinclair
CIT 247	Networking Fundamentals	3	CIS 2416	x
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		
<b>Additional Credit Hours for Track</b>		<b>15</b>		

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

**Category 8: NKU Major Requirements for the Non-Specialist Track**

NKU Course	Course	Credits	Sinclair Course	Taken at Sinclair
CSC 260	Object-Oriented Programming I	3	CIS 2212	
CSC 360	Object-Oriented Programming II	3	CIS 2217	
CIT 436 or CIT 438 or CIT 472	Web Server Administration or Cloud Computing or Database Administration	3		
CIT 470 or CIT 485	Advanced Network and System Administration or 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		
<b>Additional Credit Hours for Track</b>		<b>18</b>		

Updated September 2021