



TWO DEGREES, ONE PATH

TRANSFER PATHWAY GUIDE 2023-2024

Associate of Applied Science in Computer Network Engineering Technology –
Cyber-Security Major To
Bachelor of Science in Cybersecurity

Overview

Completion of the following curriculum will satisfy the requirements for the Associate of Applied Science (AAS) in Computer Network Engineering Technology – Cyber-Security Major degree at Cincinnati State (CState) and leads to the Bachelor of Science (BS) in Cybersecurity degree at Northern Kentucky University (NKU).

Applying to the CState2NKU 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 Cincinnati State, enrolled in an associate degree program, plan to transfer to NKU, and maintain a minimum 2.0 cumulative GPA at Cincinnati State.

Degree Requirements for Cincinnati State

1) Completion of minimum 60 credit hours, 2) minimum cumulative GPA 2.0, 3) completion of an FYE course as part of the first 12 credit hours taken at Cincinnati State, and 4) completion of Cooperative Education.

Admission Requirements for 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. This major includes a minor in Computer Science.

Advising Note

Students in the CState2NKU program should work closely with their advisors when choosing courses. This document serves as a guide but does not replace academic advising. When choosing Cincinnati State courses, student may also consult the Associate of Arts advising brochure or the catalog for A and B list courses in Arts and Humanities or Social and Behavioral Sciences.

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.

**CINCINNATI STATE AAS IN COMPUTER NETWORK ENGINEERING TECHNOLOGY – CYBER-
SECURITY MAJOR TO NKU BS IN CYBERSECURITY**

Cincinnati State

Category 1: Ohio Transfer 36 Requirements

CState Course	Course or Category	Credits	NKU Course	Completed
ENG 101	English Composition 1	3	ENG 101	
Select 1: ENG 102 ENG 103 ENG 104 ENG 105	Select one course from the following: English Composition 2: Contemporary Issues English Composition 2: Writing about Literature English Composition 2: Technical Communication English Composition 2: Business Communication	3	ENG 102 ENG 102 ENG 102 GWR 200G	
TBS XXX	Arts/Humanities or Social/Behavioral Science Elective	3	TBD XXX	
MAT 131	Statistics I	3	STA 113	
PHY 150	Introduction to Physics	3	PHY 211	
	Subtotal General Education Core	15		

TBS XXX means to be selected by Cincinnati student.

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

Category 2: CState Degree Requirements for the AAS in Computer Network Engineering Technology – Cyber-Security and NKU Recommendations

CState Course	Course or Category	Credits	NKU Course	Completed
FYE 1XX	First Year Experience Elective	1	UNV 100T	
CIT 190	Career Preparation: Engineering and Information Technology	1	INF 201	
COMM 110	Public Speaking	3	CMST 101	
IT 215	Scripting	3	INF 120	
MGT 130	Project Management	3	UND 100T	
NETA 155	Server Administration 1	4	CIT 271	
NETC 121	Network Communications 1	3	INF 284	
NETC 122	Network Communications 2	3	CIT 247	
NETC 170	Governance and Management of IT	4	CIT 100T	
NETC 180	Information Risk Management	4	CYS 310 + CYS 300T	
NETC 230	Network Security Design	3	NETC 230 + NETC 240 = CIT 130 + CIT 285	

CState Course	Course or Category	Credits	NKU Course	Completed
NETC 240	Emerging Topics in Computer Network Engineering Technology	3	NETC 230 + NETC 240 = CIT 130 + CIT 285	
NETC 280	IT Documentation	4	BIS 200T	
NETC 290	Computer Network Engineering Technology Capstone Project	3	CIT 299	
NETC 291	Full-Time Cooperative Education 1: Computer Network Engineering Technology	2	CYS 296	
NETC 292	Full-Time Cooperative Education 2: Computer Network Engineering Technology	2	CYS 296	
	Total Associate Degree Credit Hours	61		

Northern Kentucky University

Category 3: NKU Additional General Education Courses

NKU Course	Course	Credits	CState Course	Taken at CState
TBS XXX	Cultural Pluralism	3		
TBS XXX	Individual & Society	3		
TBS XXX	Culture & Creativity	6		
TBS XXX	Global Viewpoints	3		
	Subtotal NKU Additional General Education Credit Hours	15		

TBS XXX means to be selected.

Students who chose PHI 110: Ethics for their Arts/Humanities or Social/Behavioral Science Elective will need a second course in the Individual & Society category but will have fulfilled the Global Viewpoints category.

Category 4: NKU Major Requirements for the BS in Cybersecurity

NKU Course	Course	Credits	CState Course	Taken at CState
CYS 310	Cybersecurity Risk Management	3	NETC 180	x
CYS 444	Software Security	3		
CIT 130	Information Technology Fundamentals	3	NETC 230 + NETC 240	x
CIT 171	Introduction to Linux	1		
CIT 371	Unix Systems	3		
CYS 285	Cybersecurity Fundamentals	3	NETC 230 + NETC 240	x
CYS 330	Introduction to Ethical Hacking	3		

NKU Course	Course	Credits	CState Course	Taken at CState
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	IT 161	
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	Waived for students with AAS degree	x
INF 120	Elementary Programming	3	IT 215	x
INF 201	Foundations of Informatics Professionals	1	CIT 190	x
INF 284	Introduction to Computer Networks	3	NETC 121	x
INF 286	Introduction to Web Development	3	IT 110	
MAT 185	Introductory Discrete Mathematics	3		
PHI 310	Information Ethics	3		
STA 205	Statistical Methods	3	MAT 131 + MAT 132	
Select 6 cr:	Select 6 credit hours from the following:			
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)	6		
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)			

NKU Course	Course	Credits	CState Course	Taken at CState
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 (3 cr)			
	Experiential learning experience. See NKU Catalog or talk to an NKU advisor about options.			
	Subtotal Major Credit Hours at NKU	64		
	Subtotal Major Credit Hours at CState	17		
	Total Major Credit Hours	81		
	Total Baccalaureate Degree Credit Hours	140		

Updated April 2023