TRANSFER PATHWAY GUIDE
2024-2025

Associate of Science in Cyber Security/Information Assurance To Bachelor of Science in Information Technology

Overview

Completion of the following curriculum will satisfy the requirements for the Associate of Science (AS) in Cyber Security/Information Assurance degree at Ivy Tech Community College (ITCC) and leads to the Bachelor of Science (BS) in Information Technology degree at Northern Kentucky University (NKU).

Applying to the IvyTech2NKU 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 Ivy Tech, enrolled in an associate degree program, plan to transfer to NKU, and maintain a minimum 2.0 cumulative GPA at Ivy Tech.

Degree Requirements for Ivy Tech

To earn a degree at Ivy Tech a student must successfully complete the required number of credits for the degree, attain a minimum GPA of 2.0 in the required technical and general education courses, and complete at least 15 degree credits in the curriculum as a regular student of Ivy Tech.

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.

Credits for Certifications: Students who have taken and passed an examination and hold a current certification at the time of registering for classes will receive credit for equivalent NKU courses based on the following course mappings.

Cisco
Students with an associate degree and Cisco Certified Entry Level (CCENT) certification will receive credit for CIT 247.

Students with an associate degree and Cisco Certified Network Associate Routing and Switching (CCNA R&S) certification will receive credit for CIT 447.

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.

Ivy Tech Community College of Indiana

Students must complete the following courses for an AS in Cyber Security/Information Assurance.

Category 1: ITCC Indiana College Core Competencies

ITCC Course	Course or Category	Credits	NKU Course	Completed
ENGL 111	English Composition	3	ENG 101	
COMM 101 or COMM 102	Fundamentals of Public Speaking or Introduction to Interpersonal Communication	3	CMST 101 CMST 220	
MATH 136	College Algebra	3	(MAT 102 or MAT 103) + MAT 100T	
MATH 200	Statistics	3	STA 205	
MATH XXX	Quantitative Reasoning	6-12	MATH201 MATH202 MATH211 MATH212 MATH221 MATH222	
TBS XXX	Scientific Ways of Knowing	3-6	TBD XXX	
TBS XXX	Scientific Ways of Knowing	3-6	TBD XXX	
TBS XXX	Social and Behavioral Ways of Knowing	3-6	TBD XXX	
TBS XXX	Humanistic and Artistic Ways of Knowing	3	TBD XXX	
TBS XXX	Social and Behavioral Ways of Knowing, Scientific Ways of Knowing, or Quantitative Reasoning	3	TBD XXX	
TBS XXX	Scientific Ways of Knowing or Quantitative Reasoning	3	TBD XXX	
	Subtotal General Education Core	**30-35**		

TBS XXX means to be selected by Ivy Tech student
TBD XXX means to be determined by NKU based on course selected at Ivy Tech

A grade of A or B in MAT 136 equates to MAT 103 + MAT 100T. Grade of C or D in MAT 150 equates to MAT 102 + MAT 100T.

Category 2: ITCC Degree Requirements for AS in Cyber Security/Information Assurance and NKU Recommendations

ITCC Course	Course or Category	Credits	NKU Course	Completed
IVYT 111	Student Success in University Transfer	1	UNV 100T	
CPIN 279	Information Technology Capstone	1	INF 200T	
CSIA 105	Introduction to Cyber Security/Information Assurance	3	CIT 100T	
CSIA 235	Advanced Digital Forensics	3	????	
CSIA 210	Network Protocol Analysis	3	INF 284	

ITCC Course	Course or Category	Credits	NKU Course	Completed
INFM 109	Informatics Fundamentals	3	CIT 130	
ITSP 132	IT Support Essentials I	2	CIT 100T	
ITSP 134	IT Support Essentials II	2	CIT 100T	
NETI 104 or NETI 109	Introduction to Networking or Networking I	3	INF 284 or CIT 200T	
SDEV 120 or CSCI 101	Computing Logic or Computer Science I	3	INF 100T CSC 200T	
	Transfer Cluster			
DBMS 110	Introduction to Data Analytics	3	INF 200T	
CSIA 210	Network Protocol Analysis	3	INF 284	
SDEV 140	Introduction to Software Development (Transfer Cluster)	3	INF 120	
SDEV 153	Web Site Development (Transfer Cluster)	3	INF 286	
SVAD 111	Linux and Virtualization Tech	3	???	Poss CIT 171
SVAD 116	Linux Administration I	3	???	Poss CIT 371
SVAD 121	Enterprise Computing (Transfer Cluster)	3	CIT 271	
	Total Associate Degree Credit Hours	**60-65**		

Northern Kentucky University

Students must complete the following for a BS in Information Technology: the core requirements, a minor or area of focus, and one of the four tracks.

Category 3: NKU Core Requirements for the BS in Information Technology

NKU Course	Course	Credits	ITCC Course	Taken at ITCC
INF 100	Orientation to College of Informatics	1	Waived for students with AS degree	
INF 120	Elementary Programming	3	SDEV 140	x
INF 282 or CSC 350	Introduction to Databases or Database Programming	3	CSCI 210 or DBMS 130	
INF 284	Introduction to Computer Networks	3	CSIA 210	x
INF 286	Introduction to Web Development	3	SDEV 153	x
CIT 130	Information Technology Fundamentals	3	INFM 109 or ITSP 132 + ITSP 134 = CIT 130 + CIT 100T	x
CIT 171	Introduction to Linux	1		
CIT 271	Windows Administration	3	SVAD 121	x

NKU Course	Course	Credits	ITCC Course	Taken at ITCC
CIT 371	Linux System Administration	3		
CIT 383	Scripting I	3		
CYS 285	Cybersecurity Fundamentals	3	CSIA 215 + CSIA 235 = CYS 285 + CIT 200T	
STA 205 or STA 250	Statistical Methods or Probability and Statistics	3	MATH 200	x
PHI 310	Information Ethics	3		
ENG 347	Technical Writing	3	ENGL 211	
	Select one of the following tracks: Network and Administration Track Cloud and System Administration Track Cybersecurity Track General Track (Courses are listed in Categories 5-8 tables below)	18		
	Subtotal Major Credit Hours at NKU	**37**		
	Subtotal Major Credit Hours at ITCC	**18**		
	Total Major Credit Hours	**55**		

Category 4: Additional Requirements at NKU

NKU Course	Course	Credits	ITCC Course	Taken at ITCC
	Subtotal Minor Credit Hours Taken at NKU Any NKU minor may be selected. Information Systems and Computer Science are common choices and require 15 additional credits.	**15-24**		
	Subtotal Elective (300/400 level) Hours	**0-8**		
	Total Baccalaureate Degree Credit Hours	**120-126**		

Credits hours for the baccalaureate degree can vary based on the courses taken at ITCC and the minor selected at NKU.

Students must choose one of the following tracks: Network and System Administration Track, Cloud and System Administration Track, Cybersecurity Track or General Track.

Category 5: NKU Requirements for the Network and System Administration Track

NKU Course	Course	Credits	ITCC Course	Taken at ITCC
CIT 247	Networking Fundamentals	3	NETI 109 + NETI 119 + NETI 209	
CIT 438	Cloud Computing	3		

NKU Course	Course	Credits	ITCC Course	Taken at ITCC
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 above. CSC 481 can count toward this elective.	3		
	Additional Track Credit Hours	**18**		

Category 6: NKJ Requirements for the Cloud and System Administration Track

NKU Course	Course	Credits	ITCC Course	Taken at ITCC
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 Track Credits	**18**		

Category 7: NKU Requirements for the Cybersecurity Track

NKU Course	Course	Credits	ITCC Course	Taken at ITCC
CYS 330	Introduction to Ethical Hacking	3		
CYS 385	Cybersecurity Analysis I	3		
CYS 484	Network Security	3		
CYS 485	Cybersecurity Analysis II	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 Track Credits	**18**		

Category 8: NKJ Requirements for the General Track

NKU Course	Course	Credits	ITCC Course	Taken at ITCC
CIT 436 or CIT 438	Web Server Administration or Cloud Computing	3		
CIT 470 or CIT 472	Advanced Network and System Administration or Database Administration	3		
CYS 330 or	Introduction to Ethical Hacking or	3		

NKU Course	Course	Credits	ITCC Course	Taken at ITCC
CYS 385	Cybersecurity Analysis I			
TBS XXX	Select 9 credit hours of 300/400 CIT or CYS coursework not taken above. CIT 247 and CSC 481 may count toward these electives. No more than 6 hours may be taken from CIT/CYS 392/399/492/499.	9		
	Additional Track Credits	**18**		

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